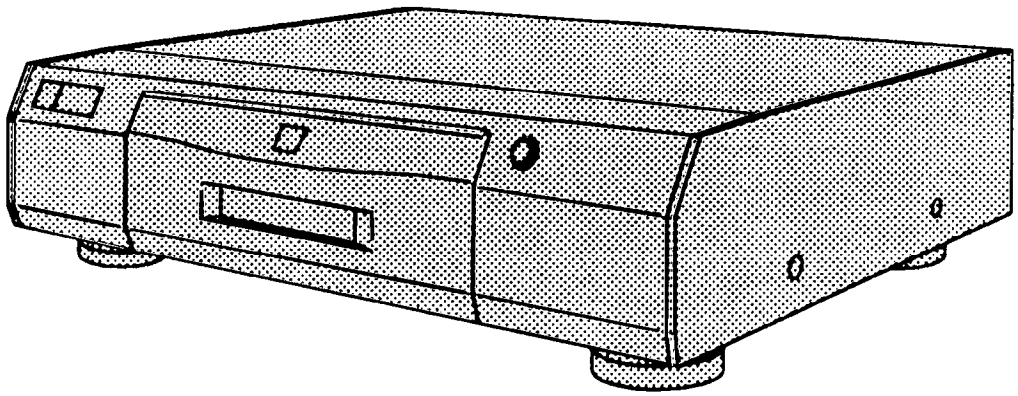
ORDER NO. VSD9812M614

Service Manual

Panasonic Mini DV DV PAL

Digital Cassette Video Recorder

AG-DV2700 E B



Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

AG-DV2700E

Power Source:	220-240 V AC 50/60 Hz
Power Consumption:	36 watts
Power Consumption When in Standby Mode:	Approx. 10 watts

Video Recording System:	2 rotary heads, Digital Component		
Audio Recording System:	PCM Digital Recording; 16 bit (48 kHz/2ch), 12 bit (32 kHz/4ch)		
Video Heads:	2 heads		
Tape Speed:	SP; 18.831mm/sec.		
	LP; 12.568 mm/sec.		
Tape Format:	DV/ Mini DV tape		
Record/Playback Time:	SP; 120 min. LP; 180 min. with DV120		
	SP; 60 min. LP; 90 min. with DVM60		
FF/REW Time:	approx. 70 sec. with DV120		
	approx. 50 sec. with DVM60		
VIDEO			
Television System:	CCIR; 625 lines, 50 fields, PAL colour signal		
Modulation System:	Digital Compornent recording		
Input Level:	AV1/AV2;	1.0 Vp-p,	75 ohm, terminated
	VIDEO IN (AV3) (PHONO);	1.0 Vp-p,	75 ohm, terminated
	S-VIDEO IN (AV3);	1.0 Vp-p,	75 ohm, terminated
Output Level:	AV1/AV2;	1.0 Vp-p,	75 ohm, terminated
	VIDEO OUT (AV3) (PHONO);	1.0 Vp-p,	75 ohm, terminated
	S-VIDEO OUT (AV3);	1.0 Vp-p,	75 ohm, terminated
	RF Modulated;	UHF channel (21-69),	75 ohm
AUDIO			
Input Level:	AV1/AV2;	−6 dBV,	more than 10 kohm
	AUDIO IN (AV3) (PHONO);	−6 dBV,	more than 10 kohm
	MIC(M3);	−70 dBV,	
Output Level:	AV1/AV2;	−6 dBV,	less than 1 kohm
	AUDIO OUT (PHONO);	−6 dBV,	less than 1 kohm
	HEAD PHONES;	−30 dBV,	8ohm
Audio Track:	16 bit (48 kHz/2ch);	1 track, 2 channels	
	12 bit (32 kHz/4ch);	2 tracks, 4 channels	

Digital Still Picture:	Digital Still Picture Output, Control Signal Input/Output (Transfer rate; max. 115 kbps)
Digital Interface:	DV Terminal (i.LINK, 4-pin)
Video Horizontal Resolution:	Colour; more than 500 lines
Audio Frequency Response:	20 Hz−20 kHz (16 bit)
	20 Hz−14.5 kHz (12 bit)
Operating Temperature:	5°C−40°C
Operating Humidity:	35%-80%
Weight:	7 kg
Dimensions:	445 (W)×123 (H)×373.5 (D) mm
Standard Accessories:	1 pc. RF Coaxial Cable
	1 pc. Remote Controller
	4 pcs. "R6" size batteries
	3 pcs. AC Mains Leads
	1 pc. DV Cable
	1 pc. Edit Cable
	1 pc. S-Video Cable
	1 pc. AV Cables
	1 pc. Editing Controller Cable
	1 pc. Digital Video Head Cleaner
	2 pcs. 21-pin Phono Transformer Adaptors (Input/Output)
Attached Parts:	1 pc. Modular Cap

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

AG-DV2700B

Power Source:	220-240 V AC 50/60 Hz
Power Consumption:	36 watts
Power Consumption When in Standby Mode:	Approx. 10 watts

Video Recording System:	2 rotary heads, Digital Component		
Audio Recording System:	PCM Digital Recording; 16 bit (48 kHz/2ch), 12 bit (32 kHz/4ch)		
Video Heads:	2 heads		
Tape Speed:	SP; 18.831mm/sec.		
	LP; 12.568 mm/sec.		
Tape Format:	DV/ Mini DV tape		
Record/Playback Time:	SP; 120 min. LP; 180 min. with DV120		
	SP; 60 min. LP; 90 min. with DVM60		
FF/REW Time:	approx. 70 sec. with DV120		
	approx. 50 sec. with DVM60		
VIDEO			
Television System:	CCIR; 625 lines, 50 fields, PAL colour signal		
Modulation System:	Digital Compornent recording		
Input Level:	AV1/AV2;	1.0 Vp-p,	75 ohm, terminated
	VIDEO IN (AV3) (PHONO);	1.0 Vp-p,	75 ohm, terminated
	S-VIDEO IN (AV3);	1.0 Vp-p,	75 ohm, terminated
Output Level:	AV1/AV2;	1.0 Vp-p,	75 ohm, terminated
	VIDEO OUT (AV3) (PHONO);	1.0 Vp-p,	75 ohm, terminated
	S-VIDEO OUT (AV3);	1.0 Vp-p,	75 ohm, terminated
	RF Modulated;	UHF channel (21-68),	75 ohm
AUDIO			
Input Level:	AV1/AV2;	−6 dBV,	more than 10 kohm
	AUDIO IN (AV3) (PHONO);	−6 dBV,	more than 10 kohm
	MIC(M3);	−70 dBV,	
Output Level:	AV1/AV2;	−6 dBV,	less than 1 kohm
	AUDIO OUT (PHONO);	−6 dBV,	less than 1 kohm
	HEAD PHONES;	−30 dBV,	8ohm
Audio Track:	16 bit (48 kHz/2ch);	1 track, 2 channels	
	12 bit (32 kHz/4ch);	2 tracks, 4 channels	

Digital Still Picture:	Digital Still Picture Output, Control Signal Input/Output (Transfer rate; max. 115 kbps)
Digital Interface:	DV Terminal (i.LINK, 4-pin)
Video Horizontal Resolution:	Colour; more than 500 lines
Audio Frequency Response:	20 Hz−20 kHz (16 bit)
	20 Hz−14.5 kHz (12 bit)
Operating Temperature:	5°C−40°C
Operating Humidity:	35%-80%
Weight:	7 kg
Dimensions:	445 (W)×123 (H)×373.5 (D) mm
Standard Accessories:	1 pc. RF Coaxial Cable
	1 pc. Remote Controller
	4 pcs. "R6" size batteries
	1 pc. AC Mains Lead
	1 pc. DV Cable
	1 pc. Edit Cable
	1 pc. S-Video Cable
	1 pc. AV Cables
	1 pc. Editing Controller Cable
	1 pc. Digital Video Head Cleaner
	2 pcs. 21-pin Phono Transformer Adaptors (Input/Output)
	1 pc. Clamp Filter
Attached Parts:	1 pc. Modular Cap

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

INTRODUCTION

This Service Manual contains technical information such as General Description, Adjustment Procedures, Block Diagrams / Schematic Diagrams / C.B.A. Layout and Exploded Views / Parts Lists which service personnel to understand and service the Panasonic Digital Video Cassette Recorder model AG-DV2700E/B.

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Note : Some parts of this service manual have been made based on NV-DV10000.
The portion or section mentioned NV-DV10000B is equivalent to AG-DV2700B and NV-DV10000EC is AG-DV2700E.

CONTENTS

Caution for AC Mains Lead (AG-DV2700B)

IMPORTANT

Your attention is drawn to the fact that the recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

WARNING

TO REDUCE THE RISK OF FIRE OF SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

As this equipment gets hot during use, operate it in well ventilated place; do not install this equipment in a confied space such as a book case or similar unit.

FOR YOUR SAFETY

■ DO NOT REMOVE OUTER COVER.

To prevent electric shock, do not remove cover.
There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

For your safety please read the following text carefully

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5 amp fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS 1362.
Check for the ASTA mark ◈ or the BSI mark ♡ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstance should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚

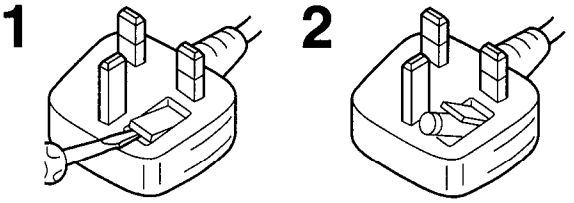
How to replace the Fuse

- There are two types of the AC Mains Lead assembly: **A** and **B** as shown below.

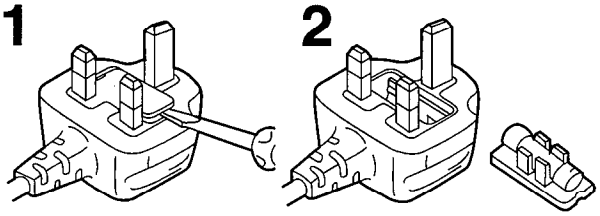
1 Open the fuse compartment with a screwdriver.

2 Replace the fuse and fuse cover.

TYPE A



TYPE B



This VCR has an On Screen Display (OSD) function which allows for timer recording and various other settings. The main operation buttons used in the function are listed below. These buttons are on the remote controller.

MENU: To make the On Screen Display Main menu appear on the TV screen.
To return to the previous screen.
EXIT: To exit the menu completely.
OK: To confirm the selection, or to store.
▲▼◀▶ : To make selections from the On Screen Display.
These buttons can also be used for the playback, stop, rewind and fast forward mode.

SECTION 1
GENERAL DESCRIPTIONS

1. SERVICE INFORMATION

1-1. Channel Memory IC Initialization

Memory IC30012 has to be initialized due to the setting value changes when replacing it.

Note:

a) **When replacing the memory IC30012, the OSD microprocessor IC30013 should be replaced together.**

b) It has to be performed before tuning.

c) Meaning of "MEMORY IC INITIALIZATION" is to make dependency in different models and to distinguish between different features.

d) It does not need to perform when replacing the System Control IC6001.

CHANNEL MEMORY IC INITIALIZATION

PROCEDURES	FIP Display	Monitor Screen
Simultaneously press the FF and EJECT buttons for 3 seconds.	0 00 00	None
Keep to press the FF button and press the Eject button twice.	2 00 00	None
Press the EJECT key for 3 seconds. (Eject operation is performed at this time.)	2 00 00	None
Press the CH UP key twice. (The 3rd degit changes 0→1→2 by pressing the CH up key.)	2 02 00	None
Press the POWER key.	2 02:00 (Colon starts flashing)	Service Screen (See Fig. S1)
Press the REC key on the Remote Controller Unit.	2 02:00	Service Screen (See Fig. S1)
Set the Model Code and Option Code by pressing ▶ ◀ ▲▼ keys on the Remote Controller Unit. (See Fig. S2)	2 02:00	Service Screen (See Fig. S1)
To release Service Mode, press POWER key and then press the FF then press the EJECT button more than 6 times until the normal indication on the FIP.	10:00	None

Service		
	Version	
OSD	VCCZ1.35	0
MAIN	V1CJ0.34	0
Pos for time ref.	NONE	
Last error code:	00	
Model Code	104 (68h)	
Option Code	160 (A0h)	
Clock adjust	+ 0	
VPS/PDC default	AUTO (depend)	

Fig. S1 Service Screen

Caution:
Since the "Clock adjust" and "VPS/PDC default" are future expansion, do not change the initial setting.
If changing the "Clock adjust" accidentally, set the code "+0" by pressing ▲▼ keys on the Remote Controller Unit.
If changing the "VPS/PDC default" accidentally, set the code mentioned "(default)" by pressing ▲▼ keys on the Remote Controller Unit.

Model	Model Code	Option Code
AG-DV2700E	164	136
AG-DV2700B	168	160

Fig. S2 Model Code & Option Code

2. Service Position

2-1. Extension Cables

Use the following Extension Cables when checking individual circuit boards.

No.	Part No.	Part Name	Connection	Q'ty	Remarks
1	VFK1405	Audio Connection C.B.A.	Main C.B.A. - Audio C.B.A.	1	
2	VFK1406	Digital Connection C.B.A.	Main C.B.A - AV Digital C.B.A.	1	
3	VFK1407P	Y/C Connection C.B.A.	Main C.B.A. - Analog Y/C C.B.A.	1	
4	VFK1408	Motor Connection C.B.A.	Main C.B.A. - Motor Drive C.B.A.	1	
5	VFK0849	20P Flat Cable	Digital FP3201 - Head Amp FP5002	1	
6	VFK1445	26P Flat Cable	Main P6703 - Mech. P6504	1	
7	VFK1446	32P Flat Cable	Main P6701 - Mech. P6505	1	
8	VFK1436	14P Extension Cable	Motor Power P2502 - Mech. P2705	2	
9	VFK1448	12P Extension Cable	Main P6707 - Power P1102	1	

Fig. 2-1 Extension Cable

2-2. Service Position

a. Service Position for AV Digital, Analog Y/C, Audio or Motor Power C.B.A.

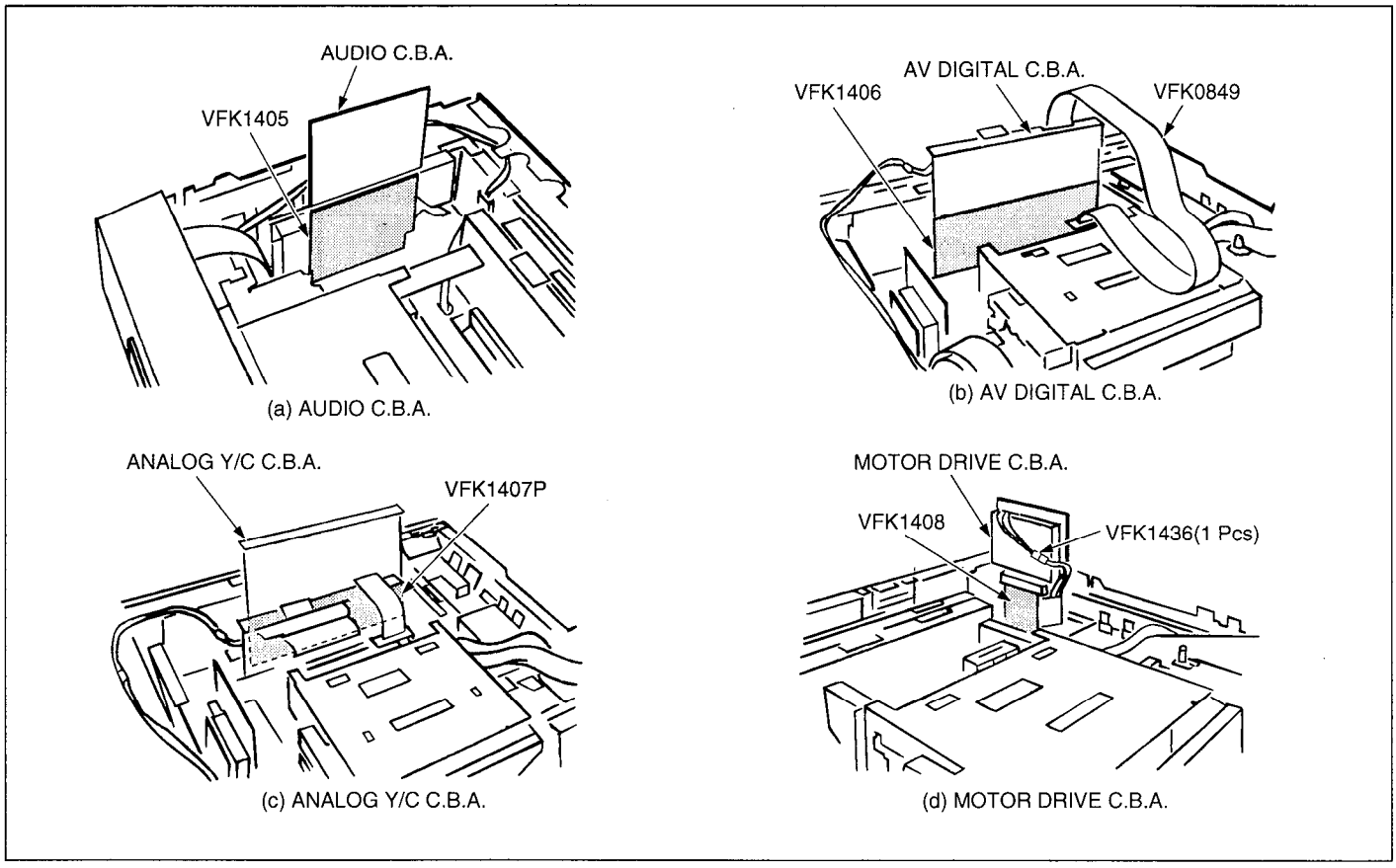


Fig. 2-2 Service Position for AV Digital, Analog Y/C, Audio and Motor Drive C.B.A.

b. Service Position for Mechanism Drive C.B.A.

When checking the Mechanism Drive C.B.A., remove the Mechanism unit with Mechanism Drive C.B.A. from the frame. Then, connect the extension cables as shown in Fig. 2-3 and turn over the Mechanism unit.

c. Service Position for Main C.B.A.

When checking the Main C.B.A., take out the Mechanism unit with Mechanism Drive C.B.A. and Main C.B.A. from the frame. Then, connect extension cables as shown in Fig. 2-4 and turn over the Main C.B.A..

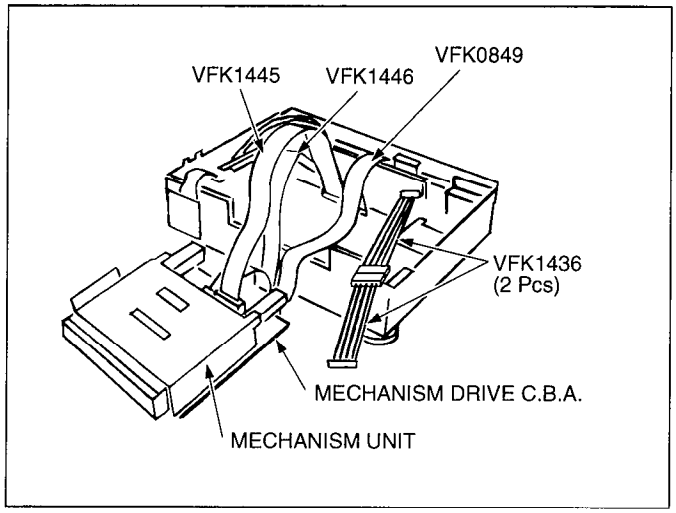


Fig. 2-3 Service Position for Mechanism Drive C.B.A.

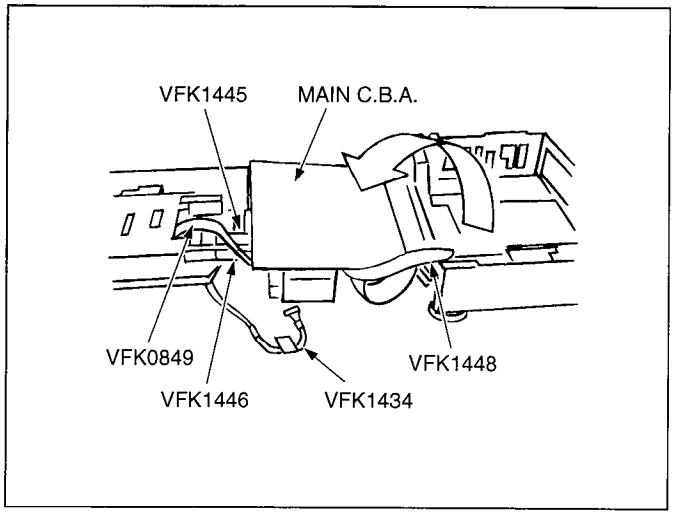


Fig. 2-4 Service Position for Main C.B.A.

2-3. Electrical Adjustment

1. PREPARATION

To perform electrical adjustments completely, the following measuring equipment and system should be prepared.

1-1. Measuring Equipment

Equipment	Specification	
Dual-Trace Oscilloscope	Voltage Range	0.001 to 50V/Div.
	Frequency Range	DC to 100MHz
	Probes	10:1, 1:1
DVM (Digital Volt Meter)	Voltage Range	0.001 to 50V
Frequency Counter	Frequency Range	0 to 150MHz

Fig. 2-5

1-2. Special Fixtures and Tools

Please refer to the special jigs and tools list at the end of the electrical adjustment procedure section.

1-3. PC EVR System

The table in figure 2-6 shows the all electrical adjustments, some of the adjustments need the PC EVR System.

Menu	Adjustment	Nasality of PC EVR System	Menu	Adjustment	Nasality of PC EVR System
SERVO ADJUSTMENT MENU	**1. Reel Offset Adjustment**	No	**VIDEO ADJUSTMENT MENU**	**4. Video Y-in level adjustment**	Necessary
	2. Tension Arm Offset Adjustment	No		**5. Video-in C level adjustment**	Necessary
	3. Tension Arm neutral Adjustment	No		**6. Play Y level adjustment**	Necessary
	4. Tension Arm Play Level Adjustment	No		**7. Play C level adjustment**	Necessary
	5. Tension Arm Rev Position Confirmation	No		**8. Centering adjustment**	Necessary
	6. Tension Arm Spring Adjustment	No		**9. Write product ID**	Necessary
	7. Reverse Tension Confirmation	No	**SEE MANUAL**	**10. Phase of Y sepa. V blanking pulse adj.**	No
	8. PG Shifter Adjustment (Automatic)	Necessary		**11. Phase of Y sepa. H blanking pulse adj.**	No
	9. Sensitivity adjustment of tape sensors	No		**12. PAL encoder free run adjustment**	No
SEE MANUAL	**1. E-E Y level adjustment**	No		**13. Edit OSD colour burst clock frequency adj.**	No
VIDEO ADJUSTMENT MENU	**2. Video VCO adjustment**	Necessary		**14. Edit OSD dot clock adjustment**	No
	3. RF / BITERBI adjustment	Necessary	**AUDIO ADJUSTMENT MENU**	**1. Level meter adjustment**	No

Fig. 2-6

Figure 2-7 shows the overall system connection of the PC EVR System.

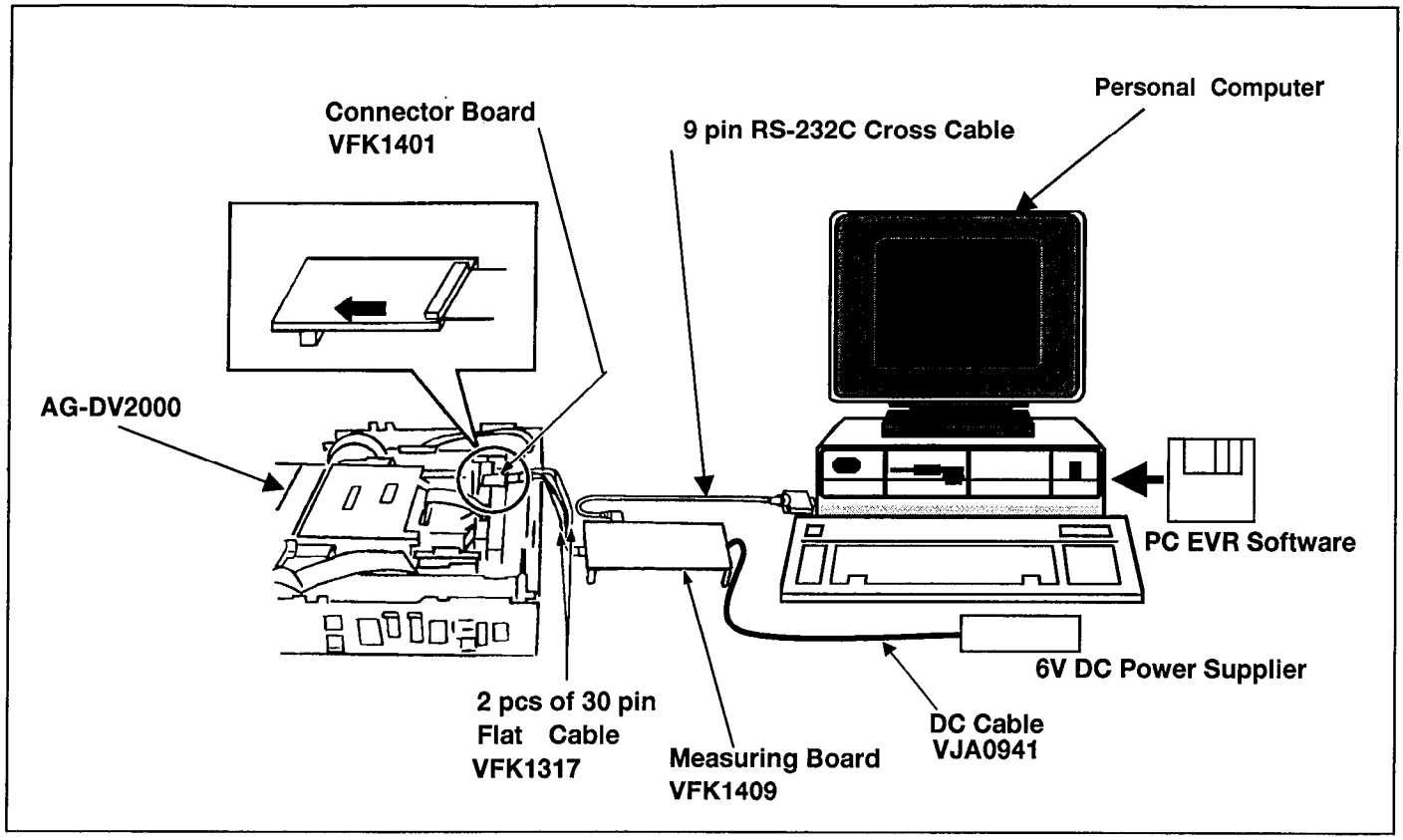


Fig. 2-7

2. PC EVR System Hook up Procedures

1. Connect the 2 pcs of 30 pin flat cables between the Measuring Board and EVR Connection Board as shown below.
   Make sure that the contact surface of 2 pcs. of 30 pin Flat Cables are inner side and direction of the EVR Connection Board is as shown in figure 2-8.

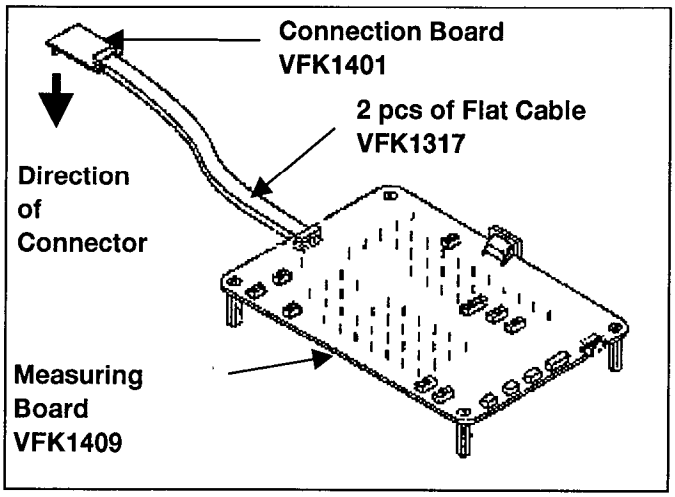


Fig. 2-8

2. Set the Connector Board with the 30 pin Cables to the unit as shown in Figure below.
Make sure that the direction of the Connection Board is correctly fit.

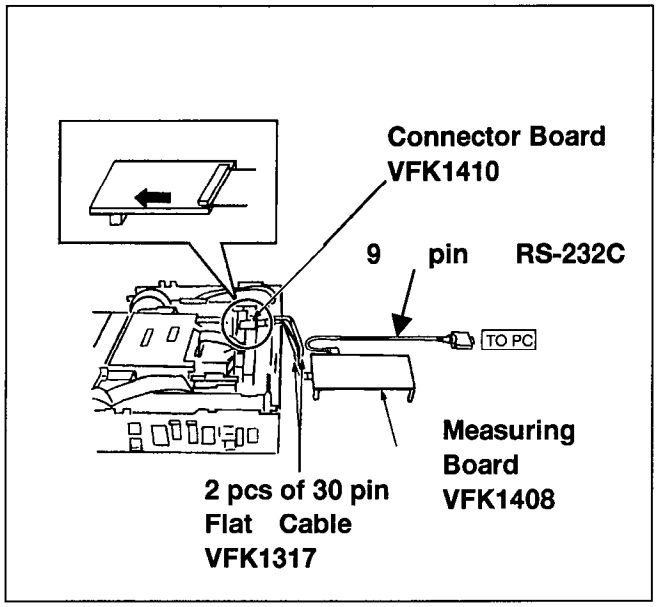


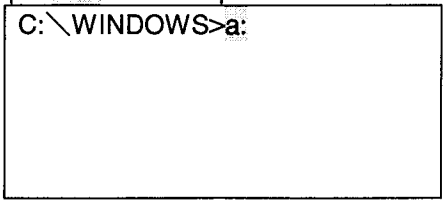
Fig. 2-9

3. Connect a 9pin RS-232C cable between the Measuring Board and RS-232C connector on the Personal Computer as shown in figure 2-7.
4. Connect the 4pin 6V/DC Power cable between AC adaptor or DC power supply unit..

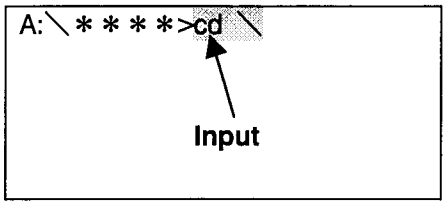
3. PC EVR SOFTWARE

3-1. BOOT UP THE SOFTWARE

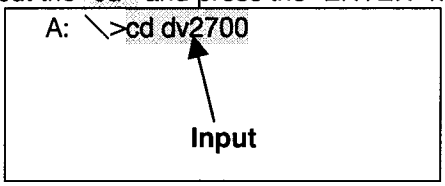
1. Power ON the Personal Computer.
Windows 95 is set up (AUTO).
2. Restart the PC in Dos mode.
3. Insert the EVR software floppy disk into the FD drive of the PC.
4. Boot up the EVR program as the following steps.
   1) Input "a :" and then press the "ENTER" key.



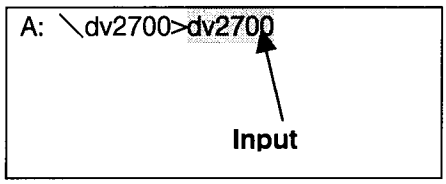
   2) Input "cd \" and then press the "ENTER" key.



   3) Input the "cd " and press the "ENTER" key.



   4) input the "dv2700" and then press the "ENTER" key.



   5) Wait for a few seconds so that the EVR adjustment program is started.
   6) For the adjustments, follow the program display.

3-2. How to Use the Main Menu

Select a Sub Menu to check, adjust the unit and etc. by pressing ↑ ↓ (UP/DOWN) Key in Main Menu. Then, press "ENTER" Key. The Sub Menu will be displayed.

Note: Menu (pages) 3 through 5 are needed for adjustment.

With using keys, also the menu can be changed.

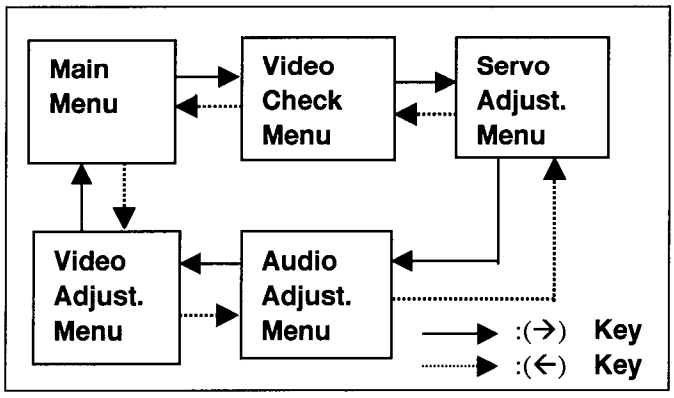


Fig. 2-10

3-3. Introduction of the Sub Menu

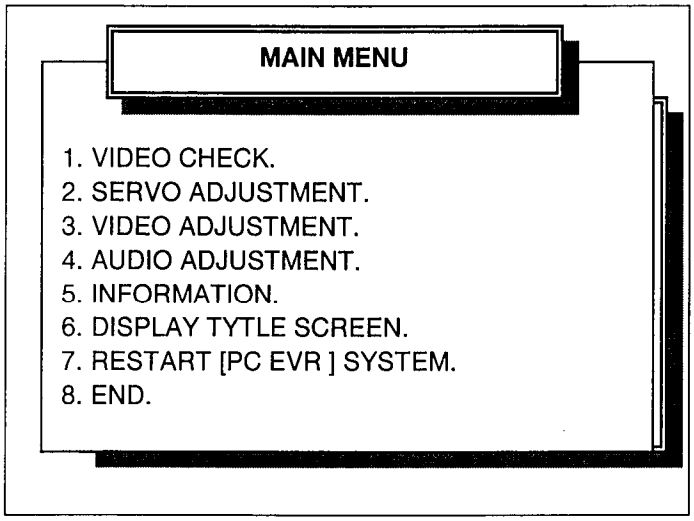


Fig. 2-11

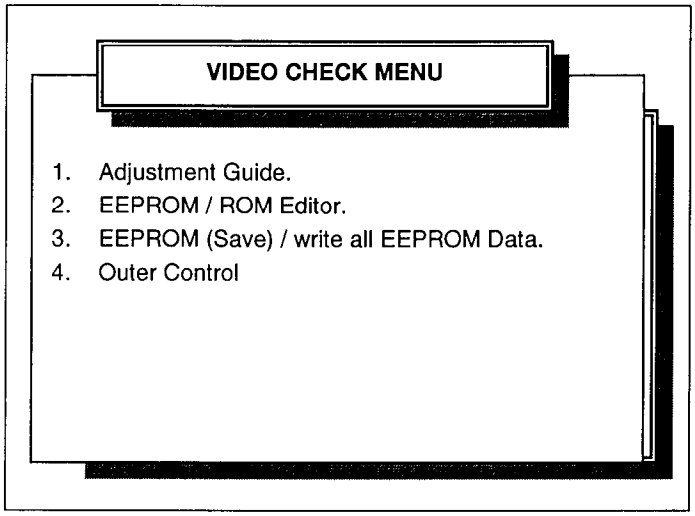


Fig. 2-12

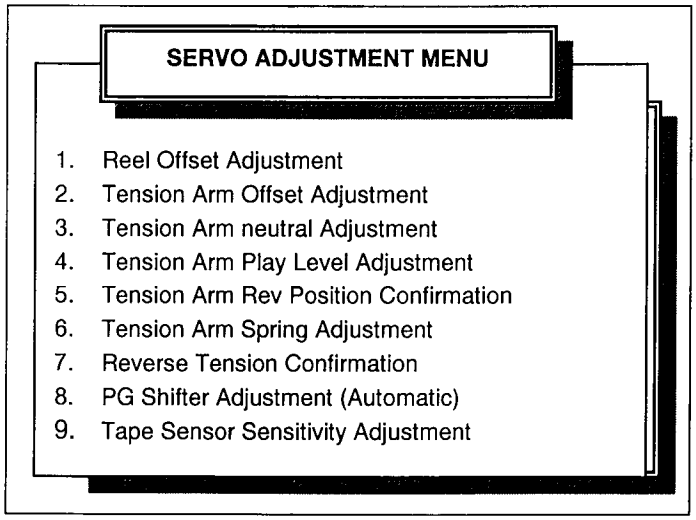


Fig. 2-13

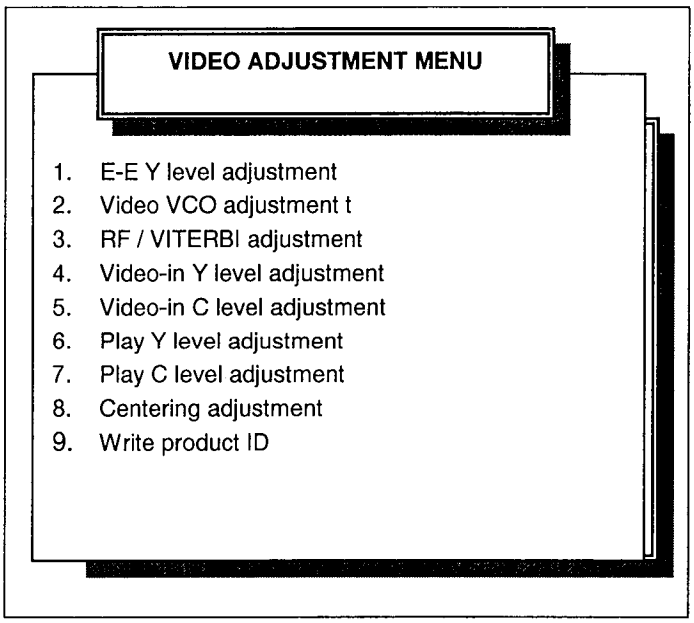


Fig. 2-14

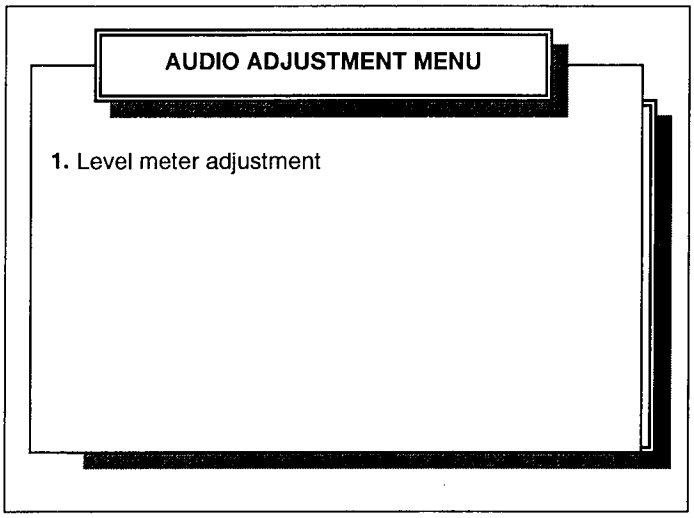


Fig. 2-15

3-4. Restoration of Connecting Error

This program checks connecting condition with the deck all the time.

When the deck power is off or reset, or cable is disconnected during servicing, restart the program by pressing "CTRL" key and "BREAK" key together.

4. EEPROM

Some of adjustment data have been stored in the EEPROM in the Digital C.B.A.

Be sure to save the EEPROM data into the personal computer before performing service and adjustment, in order to avoid any accidental data loss.

4-1. How to Save the EEPROM Data

1) Select "1. VIDEO CHECK" in the Main menu, and then press the "Enter" key.
2) Select "3. Read (Save) / Write All EEPROM data" in the Video check menu, and then press the "Enter" key.
3) Select "2. Save all EEPROM data" in Read (Save) / Write All EEPROM data menu, and then press the "Enter" key.
4) Input the File name, and then press "Enter" key.
   The data of EEPROM will be stored in the personal computer.

4-2. How to REWRITE Saved data

When it becomes impossible to adjust during service and adjustment, rewrite the saved data which stored in the personal computer and readjust.

1) Select "1. VIDEO CHECK" in the Main menu, and then press the "Enter" key.
2) Select "3. Read (Save) / Write All EEPROM data" in the Video check menu, and then press the "Enter" key.
3) Select "3. Writing from stored data file" in Read (Save) / Write All EEPROM data menu, and then press the "Enter" key.
4) Input the saved file name, and then press the "Enter" key.
5) The stored data is written in the EEPROM.

4-3. Digital C.B.A. Replacement

In case that the Digital C.B.A. is replaced, be sure to write the data to EEPROM on the Digital C.B.A. as follows.

1. Select "1. VIDEO CHECK" In the Main menu, and then press the "Enter" key.
2. Select "3. Read (Save) / Write All EEPROM data" in
3. the Video check menu, and then press the "Enter" key.
4. Select "3. Writing from stored data files." In Read (Save) / Write All EEPROM data menu, and then press the "Enter" key. Input the saved file name, and then press the "Enter" key.
   OR;
   Select "4. Writing of fixed / average values," and then press the "Enter" key. And press the "Enter" key once again.
   Then, input ID Number as follows.

4-4. How to input ID Number

When writing ID Number from the saved data which is stored in 4-1.

1. Select "2. Check [Video]." In the Main menu, and then press the "Enter" key.
2. Select "3. Read (Save) / Write All EEPROM data" in the Video check menu, and then press the "Enter" key.
4. Select "5. Writing ID from the stored file." In Read [Save]/Write All EEPROM data menu, and then press the "Enter" key. Input the saved file name, and then press the "Enter" key.
   The ID Number will be written automatically.

When the original ID information can not be read because of the destruction of EEPROM etc.:

1. Select "1. VIDEO ADJUSTMENT" in Main menu, and then press "Enter" key.
2. Select "9. Write products ID" in the Video adjustment menu, and then press the "Enter" key.
5. ID Number will be written automatically.
   (If the deck has no ID, it may cause problem on the IEEE1394 communication and etc.

3. Service Information Display

In the Service Information Display, there are four digits divided into 3 functions, Service Mode, Service Data Number and Service Information Number.

This information aids trouble shooting by indicating the source of the malfunction. The service mode number and service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technical to provide a more accurate repair cost estimate and reduce repair time.

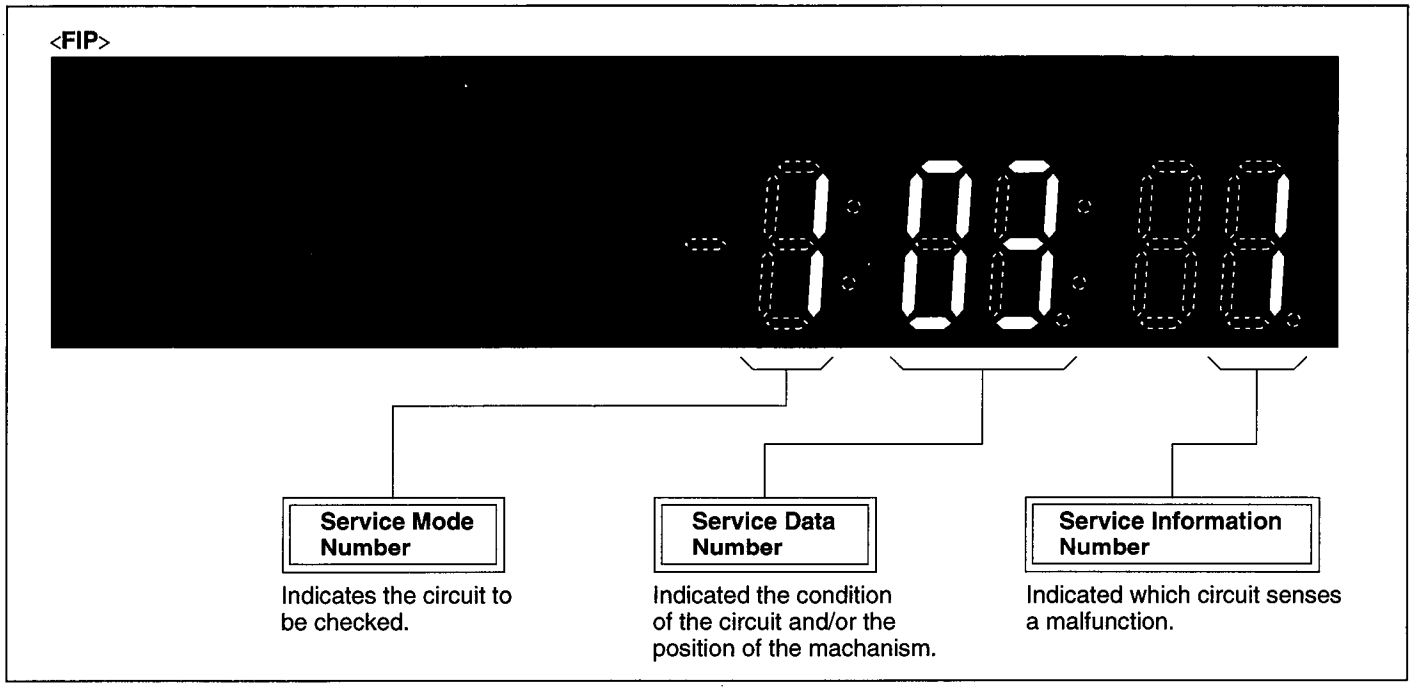


Fig. 2-16 Service Information Display

3-1. Set Service Mode

Press the FF and Eject buttons simultaneously.

The display will change "0.** :**

Pressing the FF and Eject button simultaneously will change the Service Mode Number as follows. (Refer to Fig. 2)

Mode 1 : Check tape protection circuit
Mode 2 : Check tape transport mechanism
Mode 3 : Check mode switching operation
Mode 4 : Check tray in /out operation
Mode 5 : Check control buttons
Mode 6 : Check mode switching and solenoid operations
Mode 7 : Check loading / unloading operation

The first digit indicates which of the above 7 service modes that the unit is currently in.

The second and third digits are service data that indicate the condition of the circuit or mechanism being checked.

The forth digit is the service information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is not supplied.

<table>
<tr><th>Service Mode Number</th><th>Service Data Numbers</th><th>Indication</th><th>Remarks</th></tr>
<tr><td rowspan="4">1
Tape Beginning/ End detect</td><td>00</td><td>Light detected at both sensors.</td><td></td></tr>
<tr><td>01</td><td>Tape Beginning.
Light to Supply Photo Sensor is blocked.</td><td></td></tr>
<tr><td>02</td><td>Tape End.
Light to Take-up Photo Sensor is blocked.</td><td></td></tr>
<tr><td>03</td><td>No light detected at either sensor.</td><td></td></tr>
<tr><td rowspan="5">2
Mechanism position detect</td><td>03</td><td>Cassette Down</td><td></td></tr>
<tr><td>05</td><td>H/L Position</td><td></td></tr>
<tr><td>07</td><td>Middle Position</td><td></td></tr>
<tr><td>09</td><td>Stop Position</td><td></td></tr>
<tr><td>33</td><td>Tray Open Position</td><td></td></tr>
<tr><td rowspan="8">3
Process mode detect</td><td>0*, 2*, 3*</td><td>Tray In → Stop</td><td></td></tr>
<tr><td>6*</td><td>Stop → Play</td><td></td></tr>
<tr><td>8*</td><td>Play → Cue</td><td></td></tr>
<tr><td>9*</td><td>Play → Rev</td><td></td></tr>
<tr><td>n*</td><td>Stop → FF/Rew</td><td></td></tr>
<tr><td>2*</td><td>Loading</td><td></td></tr>
<tr><td>L*</td><td>Unloading</td><td></td></tr>
<tr><td rowspan="2">4
Tray process mode detect</td><td>1*</td><td>Tray In condition</td><td></td></tr>
<tr><td>*2→ *3→ *4→ 00</td><td>Tray Out condition</td><td></td></tr>
<tr><td rowspan="8">5
Mode detect</td><td>00</td><td>Stop</td><td></td></tr>
<tr><td>02</td><td>Rew</td><td></td></tr>
<tr><td>03</td><td>FF</td><td></td></tr>
<tr><td>04</td><td>Rev</td><td></td></tr>
<tr><td>05</td><td>Cue</td><td></td></tr>
<tr><td>08</td><td>Play</td><td></td></tr>
<tr><td>0U</td><td>Rec</td><td></td></tr>
<tr><td rowspan="4">6
Mechanism position detect</td><td>1U</td><td rowspan="4"><table><tr><th>Solenoid condition</th><th>Pinch</th><th>S Reel</th><th>T Reel</th></tr><tr><td>Stop</td><td>On</td><td>Off</td><td>Off</td></tr><tr><td>FF/REW</td><td>Off</td><td>Off</td><td>Off</td></tr><tr><td>Tray In/Out</td><td>Off</td><td>On</td><td>On</td></tr><tr><td>Loading</td><td>Off</td><td>Off</td><td>On</td></tr></table></td><td rowspan="4"></td></tr>
<tr><td>16</td></tr>
<tr><td>2U</td></tr>
<tr><td>29</td></tr>
<tr><td>7
Checks loading/unloading operation</td><td>———</td><td>The Loading Motor rotates for loading operation when the “Play” button is pressed.
The Loading Motor rotates for unloading operation when the “Stop” button is pressed.</td><td>Tape not required.</td></tr>
</table>

Fig. 3-2 Service Mode Number

3-2. Self-Test Mode

This VTR has a self-diagnosis and display function. If the VTR detects trouble during installation or during use, one of the following Fault Indication Codes will automatically appear in the VTR display. Fault Indication codes are displayed in the form of a single English letter plus two numbers such as "H01".

Note;

1. The indication "H" or "F" is displayed on the FIP, and the power is automatically turned off.
When the power is turned on again, the Fault Indication Code will disappear and the unit will return to normal display mode (either clock or counter).
2. This Fault Indication Code will be stored in the Timer microprocessor even with the AC plug disconnected.
The two-digit number portion of the stored Fault Indication Code can be redisplayed in the FIP's "second" display position (the last 2 digits on the light) by placing the unit is Service Mode Number 2 when turning on Service Information Display as for example "01" or "02" etc.
If a second error occurs, only the most recent error will be displayed and stored.
3. To erase the stored Fault Indication Code data, press "FF" and "Eject" button simultaneously more than 5 seconds.

Display		Condition	Cause	Remedy/Check
H	H01	Cylinder Lock	After Cylinder lock is detected, the Cylinder does not start rotating again even after tape unloading.	Check the cylinder motor drive.
	H02	Capstan Lock	Cassette tape is not wound up during tape unloading.	Check the capstan motor drive.
F	F03	Loading Lock	Mechanism locks during tape loading.	1. Check the loading motor drive. 2. Check the mecha. phase alignment.
	F04	Unloading Lock	Mechanism locks during tape unloading.	
	F05	Reel FG Detection	Detects abnormal condition during tape loading/unloading.	Check the tension sensor and supply and take-up reel drive.
	F06	Tray In Lock	Tray Motor locks during Tray In.	1. Check the tray motor drive. 2. Check the tray phase alignment.
	F07	Tray Out Lock	Tray Motor locks during Tray Out.	
	F08	Tension Sensor Detection	Detects abnormal condition during tape loading.	1. Check the tension sensor and supply and take-up reel drive.

Fig. 3-3 Self-Test Indication Display

4. Removal of the Cassette Tape

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to remove the cassette manually.

There are 2 methods to remove the cassette as follows.

4-1. Battery Operation

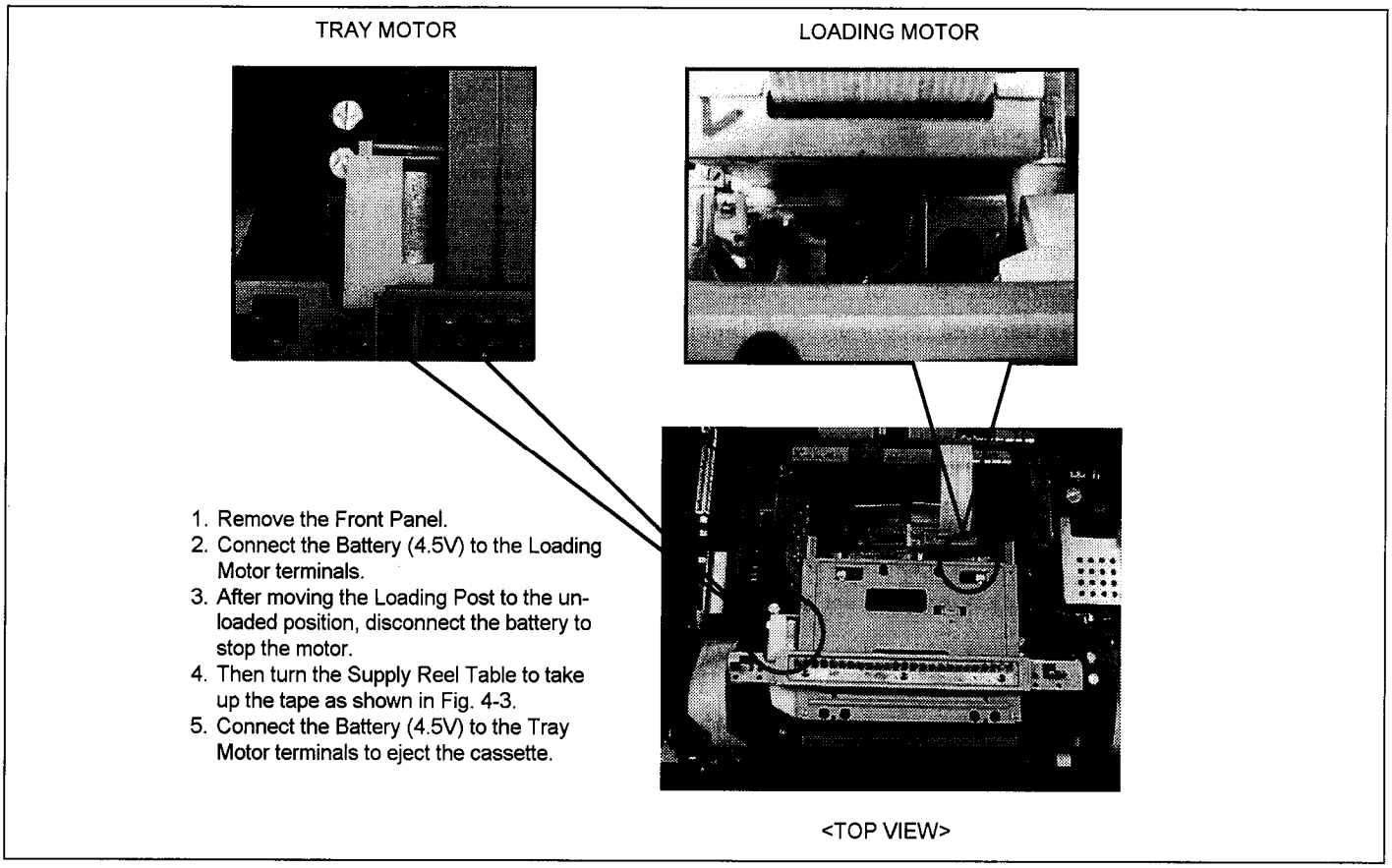


Fig. 4-1

4-2. Hand Operation

1. Unload the loading post by turning the loading motor

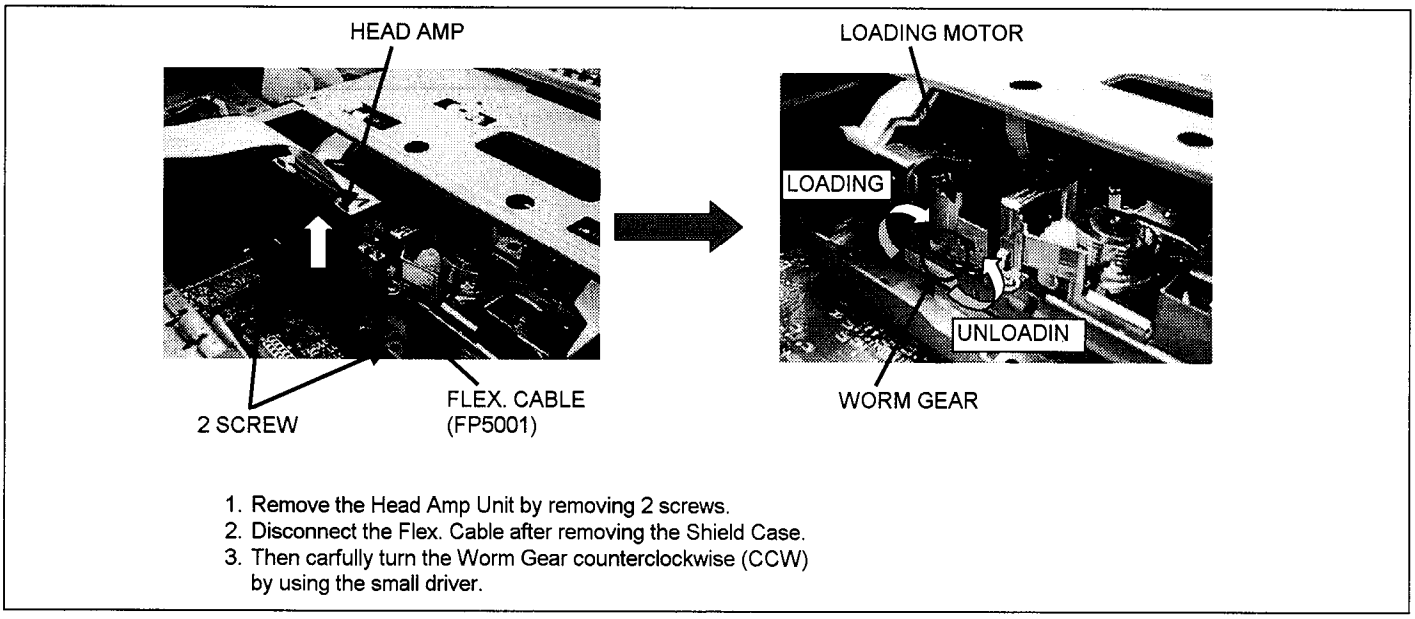
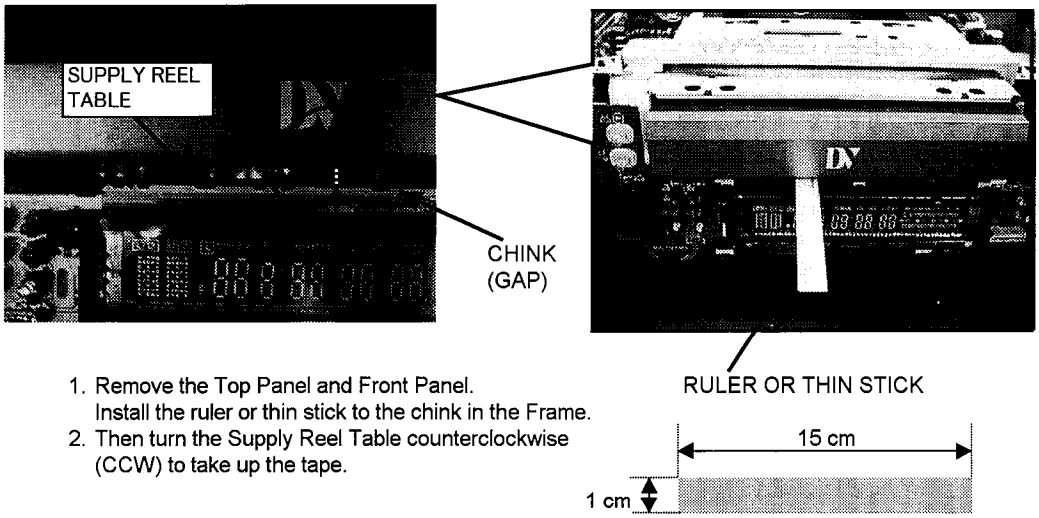


Fig. 4-2

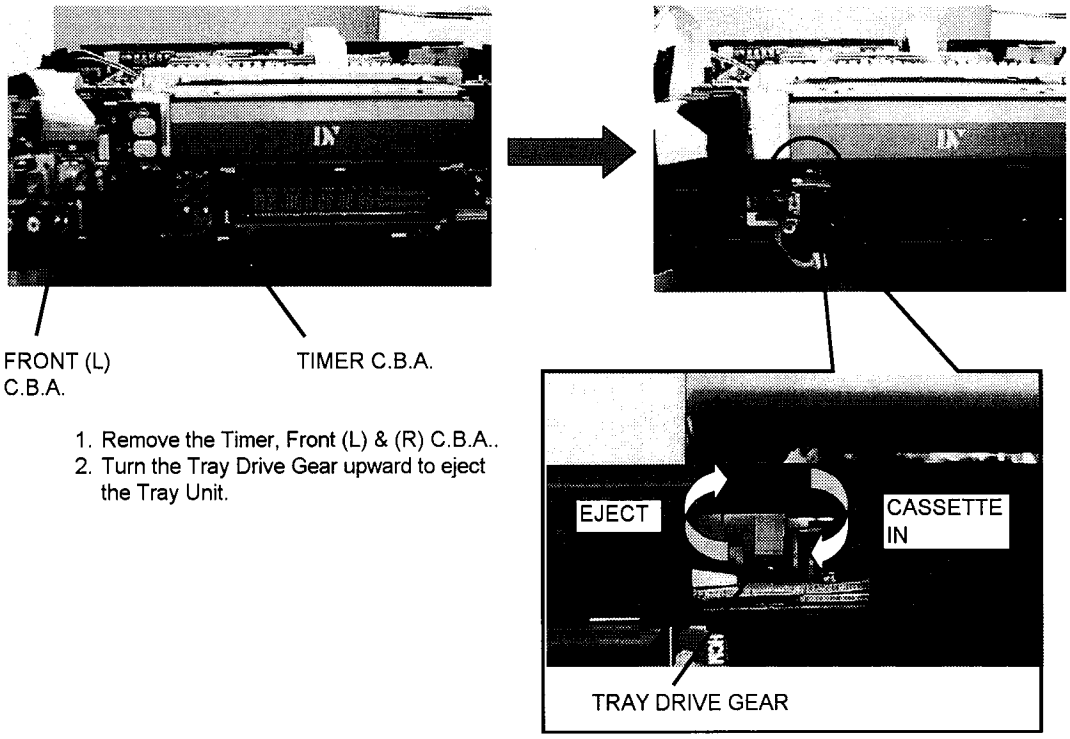
2. Take up the tape by turning the supply reel table



1. Remove the Top Panel and Front Panel.
   Install the ruler or thin stick to the chink in the Frame.
2. Then turn the Supply Reel Table counterclockwise (CCW) to take up the tape.

Fig. 4-3

3. Eject the tray by turning the tray motor

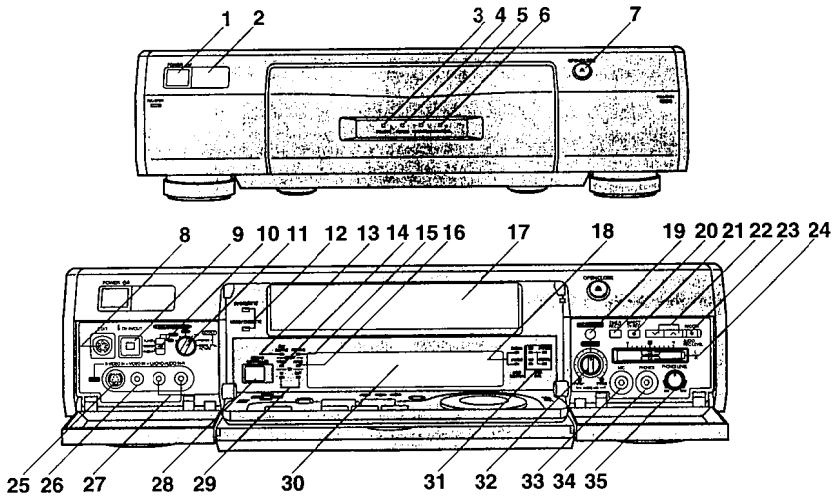


1. Remove the Timer, Front (L) & (R) C.B.A..
2. Turn the Tray Drive Gear upward to eject the Tray Unit.

Fig. 4-4

Control and Connection Sockets

This section gives a detailed explanation of the function of each button, switch and connection socket.



FRONT

1 POWER ⏻/I
Press to switch the VCR from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

2 Infra-red Remote Control Receiver Window

3 STANDBY Indicator
This indicator is lit when main lead is connected and the power is off.

4 POWER Indicator
This indicator is lit when the power is on.

5 TIMER REC Indicator
This indicator is lit when the timer recording function is on.

6 CASSETTE IN Indicator
This indicator is lit when a cassette is inserted.

7 OPEN/CLOSE
Press to open the front panel or open/close the cassette tray.

8 EDIT
By connecting a movie camera or VCR with an EDIT socket to this socket via an Edit cable, various kinds of editing functions can be performed more quickly and efficiently between two VCRs or between a VCR and a movie camera.

9 DV IN/OUT ( )
To connect the DV cable to digital video equipment with IEEE 1394-1995 compatible DV terminal.
"i.LINK" is the name of the connector in accordance with the International Standard IEEE1394-1995.
" " is the logo marked on products conforming with the "i.LINK" specifications. For further details on the DV terminal, refer to the Glossary of Terms on page 92.

10 EDIT MODE
PLAYER: When this VCR is used as the playback VCR during editing operations.
RECORDER: When this VCR is used as the recording VCR during editing operations.
- Normally set at this position.

PASSIVE: When operating this VCR using another VCR or an editing controller.
- The picture quality best suited for editing is selected.

11 EDIT CONTROL
To select a connected component when another component is to be connected for editing, etc.

12 DV CASSETTE/MINI DV CASSETTE Indicators
This indicator corresponds to the size of the cassette inserted is lit.

13 JOG/SHUTTLE Indicator
While this display is lit, the unit is set to the Jog/Shuttle mode.
- Check that the display is lit before proceeding with a jog or shuttle operation.
- The display is automatically turned off if no operation is performed.

14 VIDEO INSERT Indicator
This indicator is lit when the Video Insert editing is performed.

15 AUDIO DUB Indicator
This indicator is lit when the Audio Dubbing or Audio Mixing is performed.

16 AUDIO INSERT Indicator
This indicator is lit when the Audio Insert editing is performed.

17 Cassette Tray

18 Indicators for AUDIO MONITOR
The audio track selected by **STEREO SELECT** lights. (This applies to a tape recorded in the 12bit audio mode only.)

19 MIXING EDIT
For Mixing Editing.

20 TIMER REC
To turn the timer recording function on and off.
is lit when the function is on (standby mode).
Once the operating timer recording function is set, normal VCR operation is not possible unless this button is set to off.

21 DIRECT TV REC
For the Direct TV REC function.

22 ∨∧
To select the required programme position (TV station) of the VCR.

23 REC/OTR
To start recording.
For One-Touch Recording (OTR).

24 AUDIO REC LEVEL
To adjust the audio recording level to peak at +4 dB on the recording level indicator.
- When **INPUT SELECT** is set to DV IN the audio recording level cannot be adjusted.

25 S-VIDEO IN (AV3)
To connect the S-Video cable to a movie camera or to another VCR that has an S-Video output socket.
- If an S-Video cable is connected, other video input (AV3) is automatically switched off.

26 VIDEO IN (AV3)
To connect the video cable to a movie camera or to another VCR.

27 AUDIO IN (AV3)
To connect the audio cable to a movie camera or to another VCR.

28 EDITING CONTROLLER Socket
When using the editing controller separate from the main unit, remove the modular cap and then connect the editing controller cable.

29 DV IN/OUT Indicators
DV IN: This indicator is lit when **INPUT SELECT** is set to DV IN.
DV OUT: This indicator is lit when a playback operation is performed using this VCR or when **INPUT SELECT** is set to other than DV IN.

30 Display

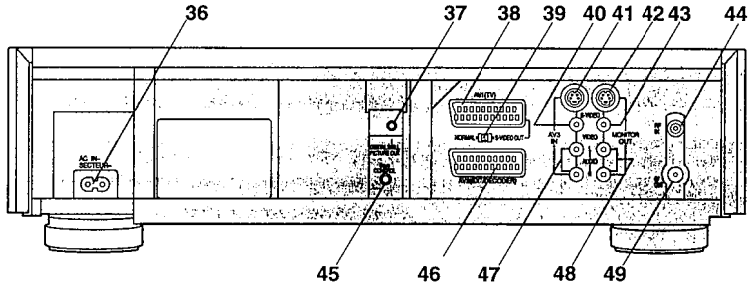
31 Indicators for AUDIO DATA
Displays the audio data that is to be recorded, or the audio data on a tape that has already been recorded. The audio recording mode can be set in the SET UP menu.
12bit-STEREO1: To play back a tape that is recorded in 12bit audio mode.
12bit-STEREO2: To play back a STEREO2 audio tape recorded in the 12bit audio mode.
16bit : To play back a tape that is recorded in 16bit audio mode.

32 AUDIO MIX Level
During the Audio Mixing function:
To adjust the volume of the original audio (STEREO1).
During playback of a tape recorded in the 12bit audio mode:
To adjust the mix balance between the STEREO1 and STEREO2 audio.

33 MIC
To connect to a microphone for recording.
Once connected, this socket has priority.

34 PHONES
To connect stereo headphones.

35 PHONES LEVEL
For adjusting the volume level of connected stereo headphones.

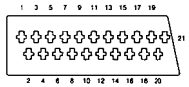


REAR

36 AC IN~
To connect to the main power supply.

37 DIGITAL STILL PICTURE OUT
To connect the VCR with a computer in order to transmit the image data to the computer.

38 AV1 (TV)
This 21-pin scart terminal carries input and output signals for both picture and sound. TV sets equipped with a similar socket can be connected here.
The scart terminal is also called Peritel
Euro Connector
Euro AV



NORMAL (AV1/AV2)	S-VIDEO (AV1)
01 AUDIO OUTPUT CH2 (R)	01 AUDIO OUTPUT CH2 (R)
02 AUDIO INPUT CH2 (R)	02 AUDIO INPUT CH2 (R)
03 AUDIO OUTPUT CH1 (L)	03 AUDIO OUTPUT CH1 (L)
04 AUDIO GND	04 AUDIO GND
05 BLUE GND	05 No connection
06 AUDIO INPUT CH1 (L)	06 AUDIO INPUT CH1 (L)
07 BLUE	07 No connection
08 SWITCHING VOLTAGE	08 SWITCHING VOLTAGE
09 GREEN GND	09 No connection
10 CONTROL SIGNAL (AV1 only)	10 CONTROL SIGNAL
11 GREEN	11 No connection
12 No connection	12 No connection
13 RED GND	13 C OUT GND
14 BLANKING GND	14 No connection
15 RED	15 C OUT
16 BLANKING	16 No connection
17 VIDEO OUTPUT GND	17 Y OUT GND
18 VIDEO INPUT GND	18 VIDEO INPUT GND
19 VIDEO OUTPUT	19 Y OUT
20 VIDEO INPUT	20. VIDEO INPUT
21 GND	21 GND

Caution: RGB reservation for only E/E operation when connecting the Pay TV decoder.

39 NORMAL/S-VIDEO OUT
NORMAL: Normally set to this position.
S-VIDEO OUT (AV1):
Set to this position when connecting the VCR to a TV set equipped with 21-pin Euro-AV Connector with pins for separate Y/C signal input.

40 VIDEO IN (AV3)
To connect the video cable to a movie camera or to another VCR.
- If units are connected to the VIDEO input sockets on both the front and rear of this VCR, the rear video inputs are automatically switched off.

41 S-VIDEO IN (AV3)
To connect the S-Video cable to a movie camera or to another VCR that has an S-Video output socket.
- If an S-Video cable is connected, other video input (AV3) is automatically switched off.
- If units are connected to the VIDEO input sockets on both the front and rear of this VCR, the rear video inputs are automatically switched off.

42 S-VIDEO OUT
To connect the S-Video cable to a TV or another VCR that has an S-Video input socket.

43 VIDEO OUT
To connect the video cable to a TV or to another VCR.

44 RF IN
To connect to the external aerial.

45 8mm CONTROL
To connect a movie camera or another VCR equipped with LANC socket for editing.

46 AV2 (EXT/DECODER)
To connect to a decoder or another VCR.

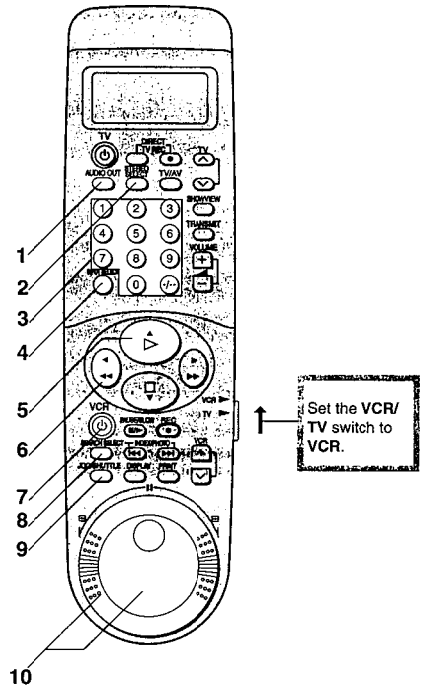
47 AUDIO IN (AV3)
To connect the audio cable to a movie camera or to another VCR.

48 AUDIO OUT
To connect the audio cable to a stereo audio system.

49 RF OUT
To connect to the aerial terminal on a TV set.

Infra-red Remote Controller

VCR OPERATION



1 AUDIO OUT
To select the desired sound mode.
At every push of this button, the audio output mode changes as follows.

→ Stereo → Left → Right →

The Left(L) and Right(R) Indicators shown which sound mode is selected in the following way.
Stereo: Both the L and R Indicators appear.
Left: The L Indicator appears.
Right: The R Indicator appears.

2 STEREO SELECT
To select the audio track (STEREO1 audio and/or STEREO2 audio) on a tape which was recorded in the 12bit audio mode. During playback, each time the button is pressed, the sound changes as follows:

→ STEREO1 → STEREO2 → STEREO1 / STEREO2 (MIX) →

- The audio track cannot be selected during the playback of a tape recorded in the 16bit audio mode.
- When **INPUT SELECT** is set to DV IN and a 12bit audio mode input signal is being received, the audio track can be selected by **STEREO SELECT** at any time.

3 Numeric Buttons
Be sure that the **VCR/TV** switch is set to **VCR**.
- To select the programme positions (1-99) of the VCR.
  9: (9)
  19: (·/··) → (1) → (9)
- To enter a ShowView number .

4 INPUT SELECT
To select the A1, A2 , A3 or DV IN external recording source.

5 ▷ (PLAY)
To start playback. "▷" is lit during playback.

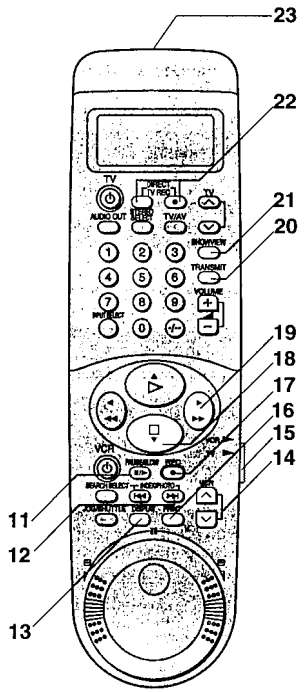
6 ◀◀ (REWIND)
In the stop mode: To rewind the tape.
In the playback mode: To search backward for a scene.
In the rewind mode: To view the video.
"◁◁" is lit during rewind.

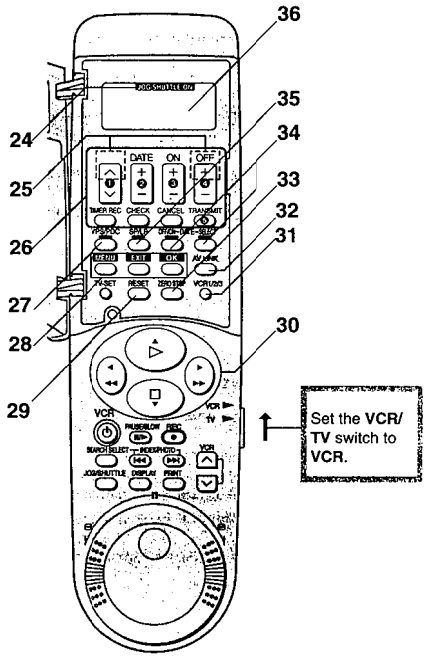
7 VCR ⏻
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

8 SEARCH SELECT
To search for a recorded programme using the index/ photoshot index search function.

9 JOG/SHUTTLE
Press this to switch to the Jog/Shuttle mode and make JOG/SHUTTLE ON appear on the remote controller display. Press again to make JOG/SHUTTLE ON disappear.
In the stop mode: Still picture (Jog/Shuttle mode).
During playback: Still picture (Jog/Shuttle mode).

10 Jog Dial/Shuttle Ring
Jog Dial (inner dial):
Operate after pressing **JOG/SHUTTLE** to switch to the Jog/shuttle mode.
To locate any desired field with utmost precision.
Shuttle Ring (outer ring):
Operate after pressing **JOG/SHUTTLE** to switch to the Jog/shuttle mode.
To adjust playback speed backward or forward.





11 PAUSE/SLOW (❚❚/▷)
During playback:
- When pressed once: Still picture. "❚❚" is lit.
- When pressed for 2 seconds or more: Slow playback. "❚▷" is lit.

During recording: To pause recording.

12 INDEX/PHOTO
For the index/photoshot index search function.

13 DISPLAY
To change the VCR display indication as follows:

→Clock → Time → Remaining → Counter →
Code Tape Time

- The time code frame values are not displayed on the main unit's VCR display.

14 ∨ ∧ (VCR)
To select the required programme position (TV station) of the VCR.

15 VCR/TV switch
VCR: To select the VCR operation mode.
TV: To select the TV operation mode.

16 PRINT
To print out images when the VCR is connected to a video printer with an Edit socket.

17 REC
To start recording.

18 □ (STOP)
To stop playback or recording.

19 ▶▶ (FAST FORWARD)
In the stop mode: To fast forward the tape.
In the playback mode: To search forward for a scene.
In the fast forward mode: To view the video. "▷▷" is lit during fast forward.

20 TRANSMIT
To transmit the data that has been set on the remote controller to the VCR.

21 SHOWVIEW
For the ShowView programming.

22 DIRECT TV REC
For the Direct TV REC function.
Press both buttons at the same time.

23 Infra-red Transmitter

24 JOG/SHUTTLE ON Display
While this display is lit, the VCR is set to the Jog/Shuttle mode.
- Check that the display is lit before proceeding with a jog or shuttle operation.
- The display is automatically turned off if no operation is performed.

25 ∧, OFF+
For the Child Lock Function.
See the description on page 11.

26 Timer Recording Operation Buttons
∨ ∧, DATE, ON, OFF: To programme a timer recording.
TIMER REC: To turn the timer recording function on and off. [⏲] is lit when the function is on (standby mode). Once the operating timer recording function is set, normal VCR operation is not possible unless this button is set to off.
CHECK: To programme a timer recording. To check and modify timer programmes.
CANCEL: To cancel timer programmes.
TRANSMIT: To transmit the data that has been set on the remote controller to the VCR.

27 VPS/PDC
To set the VPS/PDC recording option or cancel the option.

28 On Screen Display Menu Operation Buttons
The buttons with the green characters are used for the on screen display menu operation.
MENU: To make the On Screen Display **Main menu** appear on the TV screen.
EXIT: To exit the menu completely.
OK: To confirm the selection, or to store.

29 RESET
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.
- It is not possible to reset the Time code to "0h00m00s00f" using **RESET.**

30 ▲ ▼ ◀ ▶
To make selections from the On Screen Display. (When the On Screen Display is displayed.)
These buttons can also be used for the playback, stop, rewind and fast forward mode. (When the On Screen Display is not displayed.)

31 VCR1/2/3
To select the remote control mode.The selected mode appears on the remote controller display.
VCR1: Set this position on both the VCR and remote controller for normal use with one VCR.
VCR2: Set this position when using two Panasonic VCRs.
VCR3: Set this position when using three Panasonic VCRs.
- When the VCR's remote control mode has been switched, select the same remote control mode on the editing controller as well.

32 AV LINK
To select the VCR mode or TV mode for AV LINK.

33 ZERO STOP
For the zero stop function.

34 DATE-OFF/ON, DATE-SELECT
When pictures are recorded using this VCR or a Panasonic Digital Video Camera, the date and time of the recording are automatically recorded onto the tape's sub code track.
This button is used to select the information to be displayed on the On Screen Display.

DATE-OFF/ON:
To make the Date/Time indication appear on the TV screen.

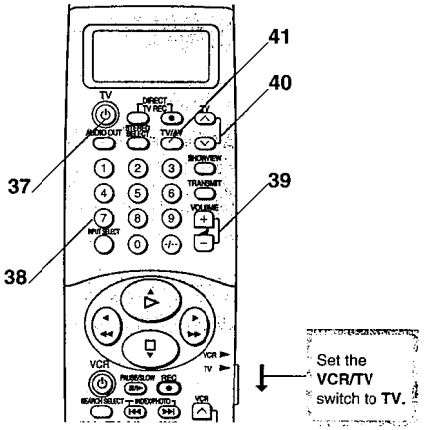
DATE-SELECT:
To change the indication to be displayed on the TV screen as follows:

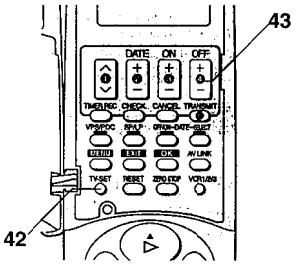
→Date → Date → Time →
Time

35 SP/LP
To select the tape speed desired for recording.

36 Display

TV OPERATION





37 TV ⏻
Press to switch the TV from on to standby mode or vice versa. In standby mode, the TV is still connected to the mains.
- With some TV models, it may only be possible to switch the TV to the standby mode using this button. In this case, use the numeric buttons, **TV/AV** or ∨ ∧ to switch the TV on.

38 Numeric Buttons
To select programme positions (1-99) of the TV.
- Be sure that the **VCR/TV** switch is set to **TV**.

39 VOLUME
To adjust the volume of the TV.

40 ∨ ∧ (TV)
To select the required programme position (TV station) of the TV.

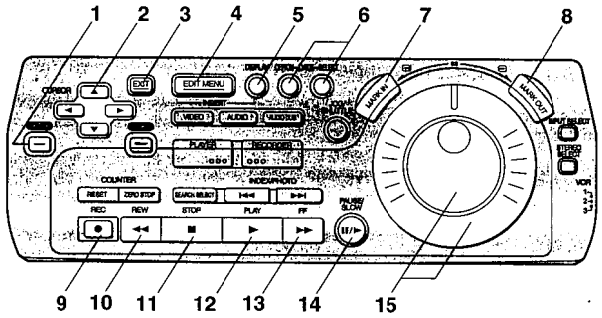
41 TV/AV
To switch between TV channels and external input channels.

42 TV-SET
To set the remote controller for operation of the TV.

43 OFF
Sets the remote controller for operation of the TV.

Child Lock function
Holding down ∧ and **OFF+** until "▷◁" and "hold" appear in the VCR display will deactivate all buttons. Any external commands will not be processed by the VCR.
To cancel this function, repeat the same procedure until "▷◁" and "hold" disappear.
- If a button is pressed while the Child Lock function is on, "▷◁" and "hold" appear in the VCR display.
- When the power is disconnected, the Child Lock function is automatically cancelled after the roughly 60 minutes of backup time.

Editing Controller



1 SET UP
To make the SET UP screen appear on the TV screen. When the SET UP screen is displayed, use this button to return to the previous screen.

2 ▲▼◀▶ (CURSOR)
To make selections from the SET UP or EDIT MENU screen. (When the SET UP or EDIT MENU screen is displayed.)

3 EXIT
To exit the SET UP or EDIT MENU screen.

4 EDIT MENU
To make the EDIT MENU screen appear on the TV screen, and to return to the previous screen. This button is also used to stop editing functions using the EDIT MENU screen.

5 DISPLAY
To change the VCR display indication as follows:

Clock → Time → Remaining → Counter
Code Tape Time

- The time code frame values are not displayed on the main unit's VCR display.

6 DATE-OFF/ON, DATE-SELECT
When pictures are recorded using this VCR or a Panasonic Digital Video Camera, the date and time of the recording are automatically recorded onto the tape's sub code track.
This button is used to select the information to be displayed on the On Screen Display.

DATE-OFF/ON:
To make the Date/Time indication appear on the TV screen.

DATE-SELECT:
To change the indication to be displayed on the TV screen as follows:

Date → Date → Time
Time

7 MARK IN
To set edit start points for Programme Editing.

8 MARK OUT
To set edit end points for Programme Editing.

9 REC
To start recording.

10 ◀◀ (REW)
In the stop mode: To rewind the tape.
In the playback mode: To search backward for a scene.
In the rewind mode: To view the video.
"◁◁" is lit during rewind.

11 ■ (STOP)
To stop playback or recording.

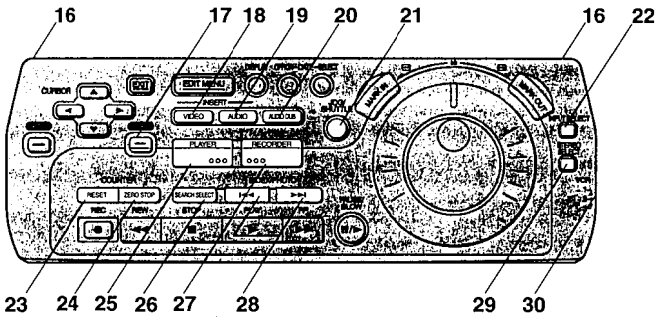
12 ▶ (PLAY)
To start playback. "▷" is lit during playback.

13 ▶▶ (FF)
In the stop mode: To fast forward the tape.
In the playback mode: To search forward for a scene.
In the fast forward mode: To view the video.
"▷▷" is lit during fast forward.

14 PAUSE/SLOW (❚❚/▶)
During playback:
- When pressed once: Still picture. "❚❚" is lit.
- When pressed for 2 seconds or more: Slow playback. "❚▷" is lit.

During recording: To pause recording.

15 Jog Dial/Shuttle Ring
Jog Dial (inner dial):
Operate after pressing **JOG/SHUTTLE** to switch to the Jog/shuttle mode.
To locate any desired field with utmost precision.
Shuttle Ring (outer ring):
Operate after pressing **JOG/SHUTTLE** to switch to the Jog/shuttle mode.
To adjust playback speed backward or forward.



16 Infra-red Transmitter

17 OK
To start Manual editing and to store the selection on the SET UP or EDIT MENU screen.

18 VIDEO INSERT
For the Video Insert function and the AV Insert function.

19 AUDIO INSERT
For the Audio Insert function and the AV Insert function.

20 AUDIO DUB
For the Audio Dubbing function or the Audio Mixing function.

21 JOG/SHUTTLE
To switch to the Jog/Shuttle mode. When the button is pressed, it lights and the VCR enters the Jog/Shuttle mode.
In the stop mode: Still picture (Jog/Shuttle mode).
During playback: Still picture (Jog/Shuttle mode).

22 INPUT SELECT
To select the A1, A2 , A3 or DV IN external recording source.

23 RESET
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00". when a video cassette is inserted.
- It is not possible to reset the Time code to "0h00m00s00f" using **RESET.**

24 ZERO STOP
For the zero stop function.

25 PLAYER
To operate the playback unit.

26 SEARCH SELECT
To search for a recorded programme using the index/ photoshot index search.

27 RECORDER
To operate the recording VCR.

28 INDEX/PHOTO
For the index/photoshot index search function.

29 STEREO SELECT
To select the audio track (STEREO1 audio and/or STEREO2 audio) on a tape which was recorded in the 12bit audio mode. During playback, each time the button is pressed, the sound changes as follows:

STEREO1 → STEREO2 → STEREO1 / STEREO2 (MIX)

- The audio track cannot be selected during the playback of a tape recorded in the 16bit audio mode.
- When **INPUT SELECT** is set to DV IN, the audio track can be selected by **STEREO SELECT** at any time: it does not have to be during playback.

30 VCR1/2/3
To select the remote control mode.The selected mode appears on the remote controller display.

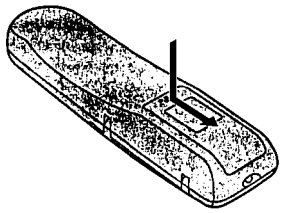
VCR1:	Set this position on both the VCR and remote controller for normal use with one VCR.
VCR2:	Set this position when using two Panasonic VCRs.
VCR3:	Set this position when using three Panasonic VCRs.

Note:
While in the editing mode the VCR's Time code or tape counter display cannot be changed.

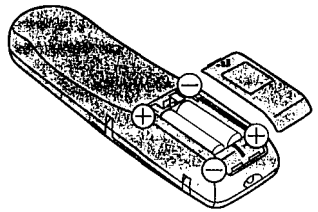
Remote Controller Setup

Installing the Batteries

1 To remove the cover, slide it in the direction of the arrow while pressing down.



2 Load the batteries with their polarity (⊕ and ⊖) aligned correctly.



3 Slide the cover back on.

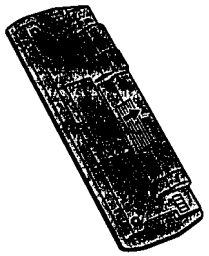
Power Source for the Remote Controller
The remote controller is powered by 2 AA, UM3 or R6 size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for Battery Replacement
- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool, dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.
- Do not use rechargeable batteries.

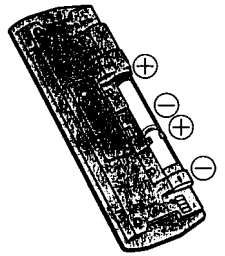
Editing Controller Set Up

Installing the Batteries

1 To remove the cover, slide it in the direction of the arrow while pressing down.



2 Load the batteries with their polarity (⊕ and ⊖) aligned correctly.



3 Slide the cover back on.

Power Source for the Editing Controller
The editing controller is powered by 2 AA, UM3 or R6 size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for Battery Replacement
- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the editing controller for a long period of time, remove the batteries and store them in a cool, dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.
- Do not use rechargeable batteries.

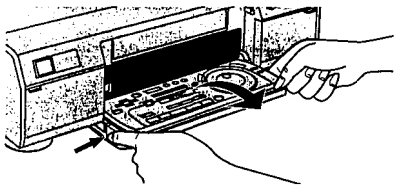
Operating the Editing Controller

The Editing controller can be operated in any of the following 3 ways:

- It can be operated while remaining attached to the main unit.
- Its batteries can be loaded, and it can be separated from the main unit and operated as the remote controller.
- It can be separated from the main unit, connected using the accessory controller cable and operated as the remote controller.

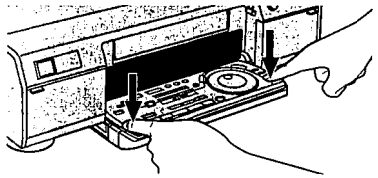
How to separate the editing controller

While pressing the buttons at the left and right of the main unit's front panel, remove the editing controller with both hands.



How to attach the editing controller

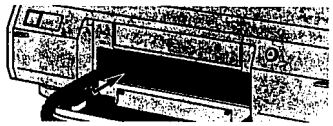
Push down on the editing controller until the areas around the left and right buttons on the unit's front panel click into position.



When connecting the editing controller to the video unit using the controller cable

1 Remove the cover over the controller socket on the rear panel of the editing controller, and insert the plug at one end of the editing controller cable into this socket until it clicks into position.

2 Remove the modular cap over the unit's controller socket, and insert the plug at the other end of the editing controller cable into this socket until it clicks into position.



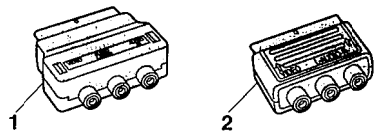
When using the editing controller as a remote controller

As a remote controller, the editing controller can be operated at a distance up to about 3 m in front and up to an angle of up to about 30 degrees to the left or right of centre. (This range changes in accordance with the ambient brightness.)

Note:

When the VCR's remote control mode has been switched, switch the remote control mode on the editing controller as well.

21pin-Phono Transformer Adaptors



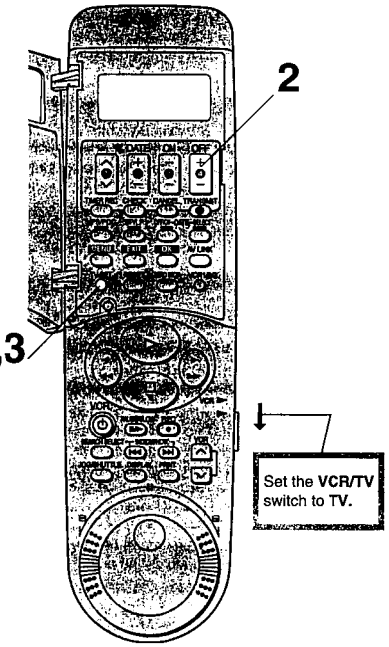
1 **21pin-Phono Transformer Adaptor (Output)**
Inserting this adaptor into AV1 allows it to be used as the Phono Audio/Video output socket.

VIDEO:	To connect the video cable to a TV or another VCR.
AUDIO(L/MONO, R):	To connect the audio cable to a monitor or another VCR.

2 **21pin-Phono Transformer Adaptor (Input)**
Inserting this adaptor into AV1 or AV2 allows it to be used as the Phono Audio/Video input socket.

VIDEO:	To connect the video cable to a TV or another VCR.
AUDIO(L, R):	To connect the audio cable to a monitor or another VCR.

Setting the Remote Controller to Operate Your TV



This setting procedure allows you to operate the TVs of some manufacturers using the supplied remote control transmitter.

Preparation

Turn on the TV.

Operations

1 Keep **TV-SET** pressed for more than 2 seconds.

TV-SET

Display Symbols

2 Press **OFF** several times.

OFF

- When the number matches the manufacturer of your TV, the TV's power is turned off. Read through the information on the following page as well.

3 Press **TV-SET.**

TV-SET

- The remote controller display changes as shown.

How to change the number

Each time the "+" side of **OFF** is pressed, the number is counted up by one as follows:

→1→2→3...30→

When the "–" side of **OFF** is pressed, the number is counted down by one in the reverse order to that indicated above.

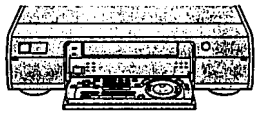
Notes:

- If you are using a Panasonic TV, this setting has already been made, and so you do not need to perform the above setting procedure. However, this remote controller may not work with some Panasonic TVs.
- Some TV models cannot be operated using this remote controller.
- This VCR remote controller is not designed to select all AV positions of some TVs. Use your TV remote cotroller to select some AV positions.

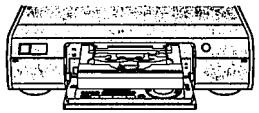
Manufacturer	Number
Panasonic	01-04
BLAUPUNKT	05
BRANDT	15
BUSH	06
CURTIS	06
DUAL	06
ELEMIS	06
FERGUSON	09-12, 14, 15
GOODMANS	06, 09-12, 14, 15
GRUNDIG	05
HITACHI	17, 18, 29, 30
ITT	21
JVC	27
LOEWE	06
METZ	08
MITSUBISHI	28
MIVAR	23
NOKIA	21, 22
NORDMENDE	15
PHILIPS	06
PYE	06
RADIOLA	06
SABA	09, 11, 12, 14, 15
SALORA	22
SAMSUNG	06, 20
SANYO	25
SBR	06
SELECO	21
SHARP	26
SIEMENS	05, 19
SONY	07
TELEFUNKEN	09-16
THOMSON	09-11, 14, 15
TOSHIBA	24

Inserting the Cassette

1 Press **OPEN/CLOSE.**
- The front panel opens.

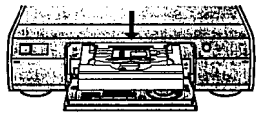


2 Press **OPEN/CLOSE** again.
- The cassette tray is extended.

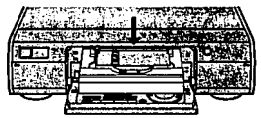


3 Align the cassette with the cassette guide and place it on the tray while ensuring that the side of the cassette with the tape exposed is facing up and the label side is turned toward you.

Mini Cassette



Standard Cassette



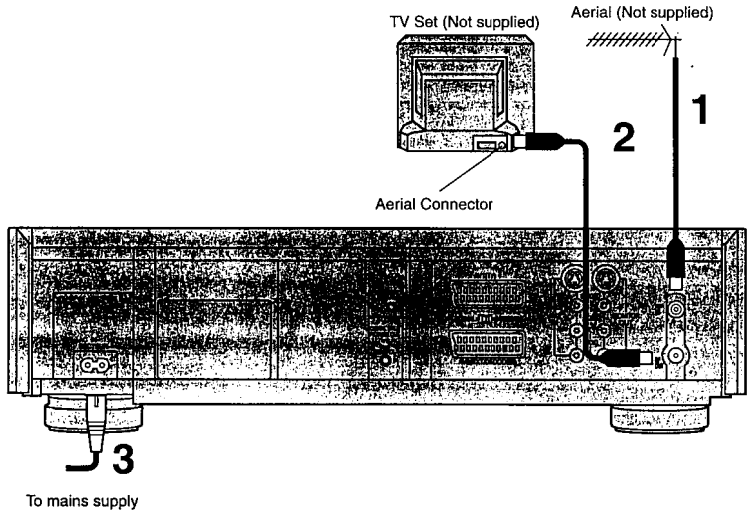
4 Press **OPEN/CLOSE.**
- The cassette tray is retracted inside the video unit.

Connections and Settings Without Using a 21-Pin Scart Cable

1 Connections

The VCR sends signals to the TV via an RF coaxial cable (supplied).

Make the connections shown in the figure below.

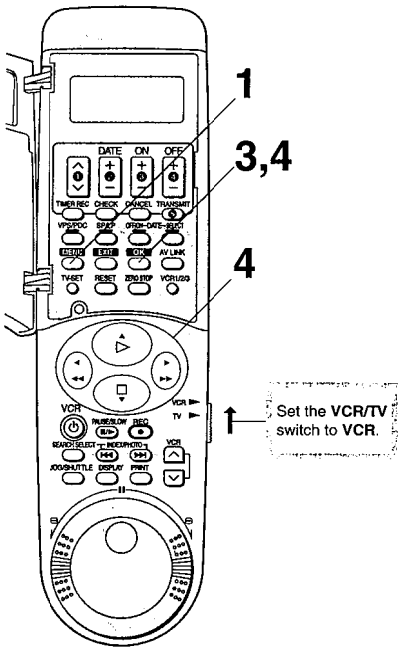


2 Settings

Setting a VCR channel on your TV allows you to view the video picture on your TV in the same way that you watch TV broadcasts.
Once the **Country** setting is completed, the VCR automatically searches for TV stations and sets the clock. (This is known as Auto Setup.)

Preparation

Turn on the TV and VCR.

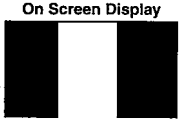


Operations

1 Keep **MENU** pressed for 5 seconds or more.
- Hold down the button until "Ch" appears in the VCR display.

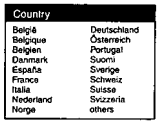
2 Set the TV to an unused position which you wish to use for your video playback.
- Tune the TV until the test pattern appears on the screen. Consult the operating instruction of your TV to find out how to tune it.
- The initial setting of the RF output channel is 36ch.

On Screen Display



(Test Pattern)

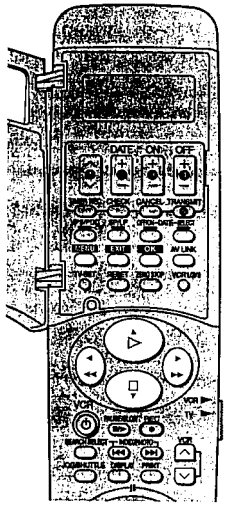
3 Press **OK** to exit the Test Pattern screen. The **Country** setting screen appears.



4 Select the desired country. Auto Setup (auto tuning and auto clock settings) then starts automatically.

To Reset Auto Setup:
Press **EXIT**, then disconnect and reconnect the power source.
The **Country** setting screen will appear on the screen.
Repeat the operations from step **3**.

Notes:
- The Auto Setup searches for TV stations from VHF minimum to UHF maximum and stores the data for every programme position. The other programme positions are skipped.
- The Auto Setup takes five minutes or more to search for the TV stations and set the clock.
- If VCR is not set correctly by Auto Setup, see Various Settings on pages 39-42.
- Auto clock setting will not work correctly if teletext information is not available. If the clock setting screen appears after auto tuning has been completed, set the clock manually.
  Refer to steps **3-5** on page 42.



To Change the RF Output Channel (using the remote controller):

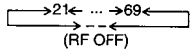
In some rare cases after Auto Setup, interference may be visible on the picture. To avoid interference, you can manually adjust the RF output channel a few steps up or down from the current setting.

Operations

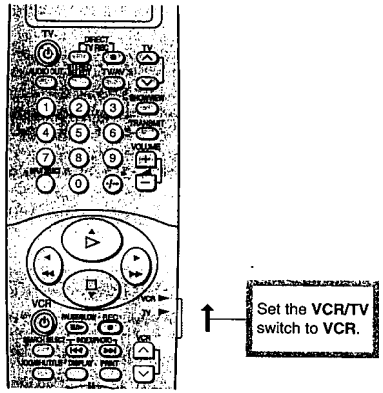
1 Turn on the TV and VCR.
2 Keep **MENU** pressed for 5 seconds or more.
- Hold down the button until "Ch" appears in the VCR display.

3 Enter the desired channel number (21-69) by using the **numeric buttons** or ∨ ∧ of the remote controller.
- Be sure that the **VCR/TV** switch is set to **VCR**.
- Set the RF output channel of the VCR to "– –" (RF OFF) when the VCR is connected to the TV via the 21-pin scart cable.

Press the **"0" numeric button** or ∨ ∧ to display "– –".



4 Press **OK** to finish the setting mode.
- Retune your TV to the new channel for the VCR.
- After the **Country** setting is set, the **Country** setting screen will not be displayed even if the RF output channel is changed and **OK** is pressed.



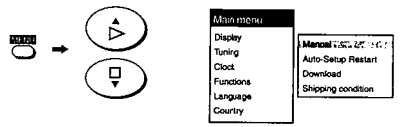
To Check the Settings for Auto Setup:

Use the following procedure to check that the settings for Auto Setup are set correctly.

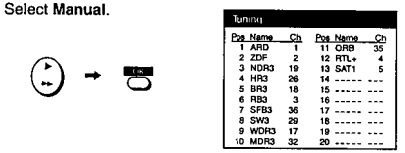
Operations

1 Press **MENU** and select **Tuning**.

On Screen Display



2 Select **Manual**.



3 Looking at the On Screen Display, check that the settings for Auto Setup are set correctly.
If the desired TV stations have all been displayed and are set in the correct order, Auto Setup is completed.
If the TV stations have not been correctly entered and set, perform the manual setting procedure on page 39.
Press **EXIT** to exit the On Screen Display.

Note:
Manual tuning is required when there is a ✳ mark at the beginning of the station name display, even if the station name is displayed. See page 40.

Connections and Settings Using a 21-Pin Scart Cable

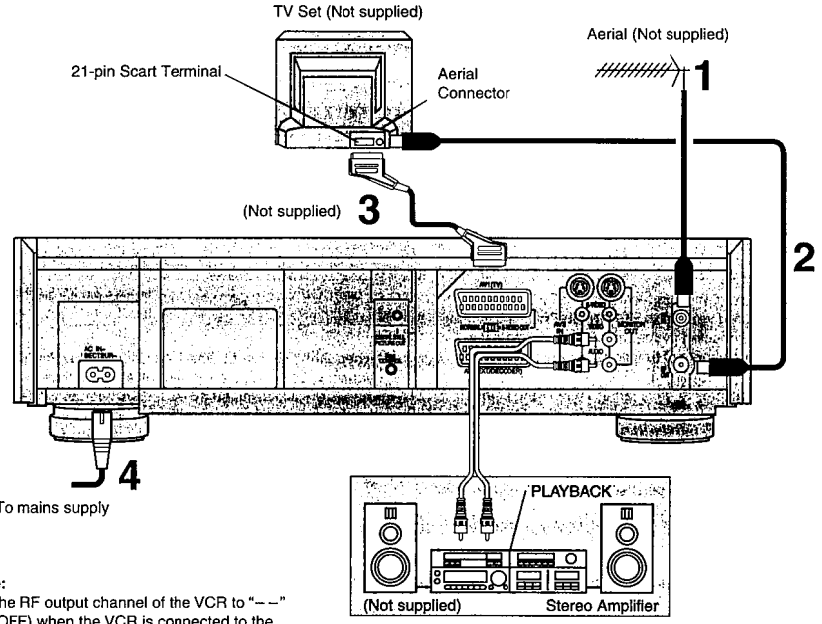
1 Connections

The VCR sends signals to the TV via a 21-pin scart cable (sold separately).

When connecting the VCR to a TV with the "Q Link", "DATA LOGIC", "NEXTVIEWLINK", "Easy Link", "Megalogic", "SMARTLINK", or other logo, the fully-wired 21-pin scart cable should be used in Step **3**. If this cable is not used, the "Preset Download" and "Direct TV REC" functions will not operate. (See pages 25 and 30.)

Make the connections as shown in the figure below.
After making these connections, one of several setting methods is performed.

Type of TV set that you have		Setting method
TV with the "Q Link" or "DATA LOGIC" logo	TV has not been preset.	Turn on the TV first. Perform Tuner setup as described in the TV operating Instructions. Download from TV starts and ends automatically.
	TV has already been preset.	Go to page 25.
TV with the "NEXTVIEWLINK", "Easy Link", "Megalogic", "SMARTLINK", or other logo	TV has not been preset.	Turn on the TV first. Perform Tuner setup as described in the TV operating Instructions. Download from TV starts and ends automatically. When Preset Download has finished, select your country (see page 46), and then restart Download (see page 41).
	TV has already been preset.	Go to page 25.
Cases other than the one above		Go to page 23.

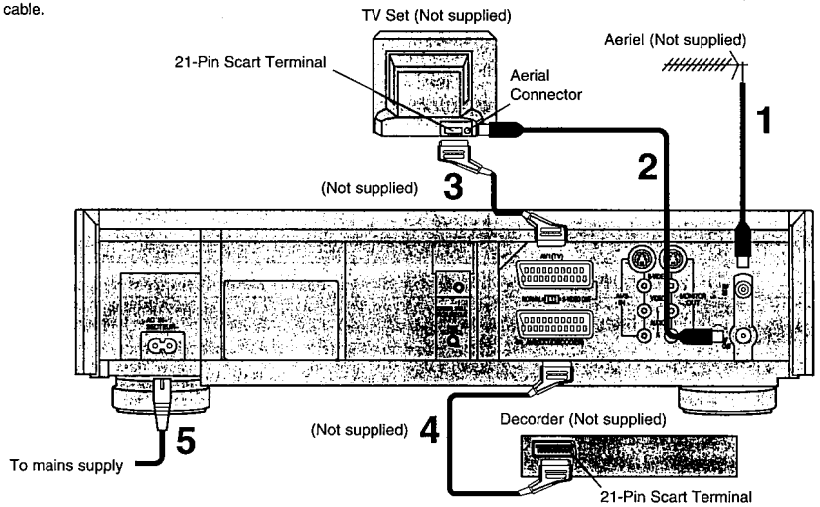


Note:
Set the RF output channel of the VCR to "– –" (RF OFF) when the VCR is connected to the TV via the 21-pin scart cable. See page 20.

● **Connection to a Stereo Amplifier**

Connection to a Decoder

In addition to the connections described on the previous page, connect the AV2 socket to the decoder using a 21-pin scart cable.



Notes:

- If the TV set is provided with an RGB-compatible connector, connect the 21-pin AV cable from the VCR to this connector. Use the fully-wired 21-pin scart cable for connecting the TV set and VCR and for connecting the VCR and decoder.
- Set the RF output channel of the VCR to "– –" (RF OFF) when the VCR is connected to the TV via the 21-pin scart cable. See page 20.
- **AV2** must first be set to **DECODER** when the decoder is connected to the AV2 socket. (See page 45.)

AV LINK
With this button, the connected colour TV set can be switched from TV mode to VCR mode (and vice versa) when it is connected by means of 21-pin scart cable. This makes a variety of functions possible, such as simultaneous recording and viewing when a Pay TV decoder or a satellite receiver has been connected.

VCR mode (VCR indicator lights up):
To enjoy sound and pictures from the VCR.

- When **MENU, SET UP** or **EDIT MENU** is pressed and the OSD (On Screen Display) screen is displayed, the unit also automatically switches to VCR mode. However, if the unit is originally in TV mode, the VCR indicator is not displayed.
- The unit also automatically switches to VCR mode when playback is started. However, the unit cannot be returned to TV mode during playback.

TV mode (VCR indicator goes off):

- To watch another programme on the TV while recording on the VCR.
- Select the programme to be watched using the TV set's tuner.
- The sound and pictures of a different channel are received by the VCR.

	VCR	TV set
Power On	VCR mode ⇕	AV input selected
	TV mode ⇕	Input from TV set's tuner*
Power Off	—	Input from TV set's tuner

*When the VCR is set to the TV mode and the Pay TV channel is selected, the signals will still be scrambled even when Pay TV is selected by the TV set's tuner. In this case, either set the VCR to the VCR mode or switch the TV set's input signals to AV input.

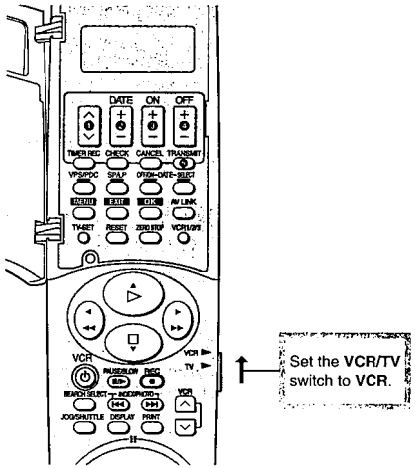
2 Settings

Auto Setup

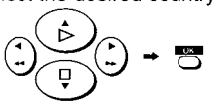
This setting is used when the VCR is not connected to a TV with the "Q Link", "DATA LOGIC", "NEXTVIEWLINK", "Easy Link", "Megalogic", "SMARTLINK", or other logo using a fully-wired 21-pin scart cable.
The VCR automatically searches for TV stations and sets the clock. (This is known as Auto Setup.)

Preparation

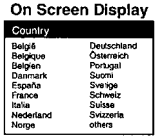
Turn on the TV and VCR.



The **Country** setting screen appears.
Select the desired country.



On Screen Display



- Auto Setup (Auto tuning and Auto clock setting) starts automatically.

To Reset Auto Setup:
Press **EXIT**, then disconnect and reconnect the power source. The **Country** setting screen will appear on the screen.

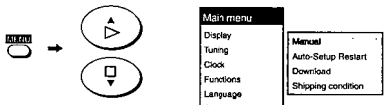
Notes:
- The Auto Setup searches for TV stations from VHF minimum to UHF maximum and stores the data for every programme position. The other programme positions are skipped.
- The Auto Setup takes five minutes or more to search for TV stations and set the clock.
- If VCR is not set correctly by Auto Setup, see Various Settings on pages 39-42.
- Auto clock setting will not work correctly if teletext information is not available. If the clock setting screen appears after auto tuning has been completed, set the clock manually.
  Refer to steps **3-5** on page 42.
- If you change the tuning details of the TV after Auto Setup has been performed on the VCR, the new information may be automatically downloaded to the VCR, and the input content of Auto Setup may be erased. If this happpens, repeat Auto Setup.

To Check the Settings for Auto Setup:

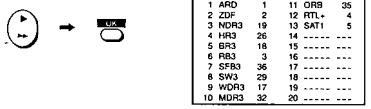
Use the following procedure to check that the settings for Auto Setup have been correctly made.

Operations

1 Press **MENU** and select **Tuning**.



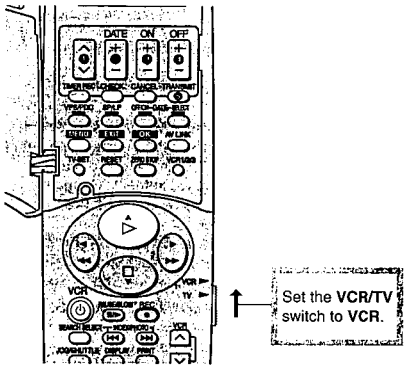
2 Select **Manual**.

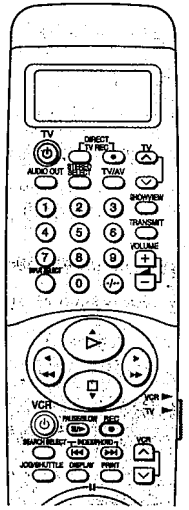


3 Looking at the On Screen Display, check that the settings for Auto Setup are set correctly.
If the desired TV stations have all been displayed and are set in the correct order, Auto Setup is completed.
If the TV stations have not been correctly entered and set, perform the manual setting procedure on page 39.
Press **EXIT** to exit the On Screen Display.

Note:
Manual tuning is required when there is a * mark at the beginning of the station name display, even if the station name is displayed. See page 40.

The "Q Link" functions





When the VCR is connected to a TV with the "Q Link", "DATA LOGIC", "NEXTVIEWLINK", "Easy Link", "Megalogic", "SMARTLINK", or other logo using a fully-wired 21-pin scart cable, you can use the "Q Link" functions.

The following Q Link functions are available.

1 **Preset Download**
When the VCR is connected to the TV, the station list data will be copied from the TV to the VCR, and the TV channels will be preset on the VCR.
See page 25.

2 **Direct TV REC**
This function allows you to immediately record the programme you are watching on the TV at the moment by simply pressing **DIRECT TV REC.**
See page 30.

3 **TV/VCR Auto Power On**
(This function is only available when the VCR is connected to a TV with the "Q Link" or "DATA LOGIC" logo.)
Even if the TV or VCR is in the standby mode, the TV and VCR will automatically turn on when one of the buttons [▷ **(PLAY)** or **CHECK**] is pressed.
- When a cassette with the opened record prevention tab is inserted into the VCR, the VCR starts up and automatically begins playback. The TV also turns on.

4 **VCR Auto Power Off**
(This function is only available when the VCR is connected to a TV with the "Q Link" or "DATA LOGIC" logo.)
Turning the TV off will also turn the VCR off.
However, this operation works only when the VCR has been set to Rewind or Stop mode, or there is no tape inside.
- If the Power Off command is received while the VCR is rewinding the tape, the VCR will not turn off until rewinding is completed.
- This operation does not work when settings are being mode. (Download, Auto Setup, Auto Clock Setting, Manual Search)

5 **TV On Screen Display Message**
(This function is only available when the VCR is connected to a TV with the "Q Link" or "DATA LOGIC" logo.)
With this function, VCR messages appear on the TV screen even in the TV mode.

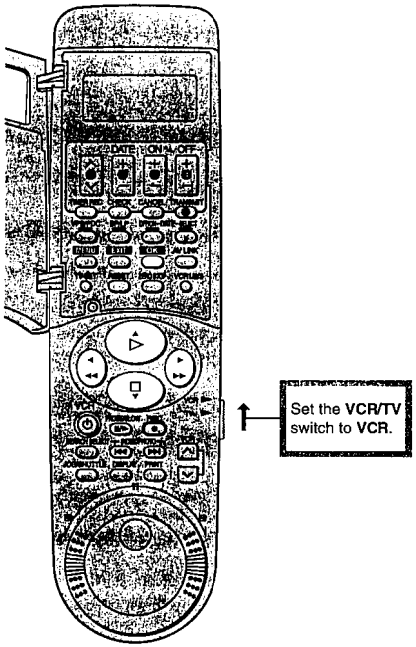
Message	Conditions when message appears
This programme has already started	Timer recording is starting.

Note:
Depending on the TV, the message may not appear correctly.

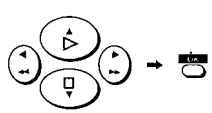
Preset Download

This setting is used when the VCR is connected to a TV with the "Q Link", "DATA LOGIC", "NEXTVIEWLINK", "Easy Link", "Megalogic", "SMARTLINK", or other logo using a fully-wired 21-pin scart cable.

When the VCR is connected to the TV, the station list data will be copied from the TV to the VCR, and the TV channels will be preset on the VCR.
This function is known as "Preset Download".



Applicable to TVs with the "Easy Link", "Megalogic" and "SMARTLINK" logo:
The **Country** setting screen appears when the VCR is turned on after being connected to the TV using the fully-wired 21-pin scart cable.
Select the desired country.



On Screen Display

Country

België	Deutschland
Belgique	Österreich
Belgien	Portugal
Danmark	Suomi
España	Sverige
France	Schweiz
Italia	Suisse
Nederland	Svizzera
Norge	others

- Next, the "Download" screen appears, and downloading begins immediately.

Applicable to TVs with "Q Link" and "DATA LOGIC":
If the VCR is connected to a TV with the "Q Link" or "DATA LOGIC" logo, the "Download" screen appears, and downloading begins immediately.

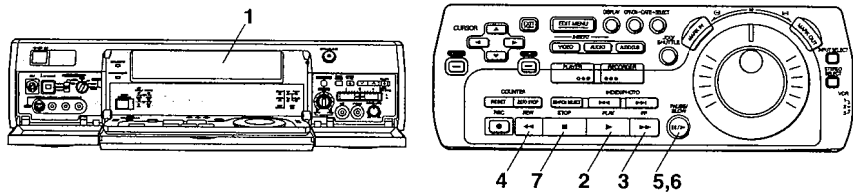
Download

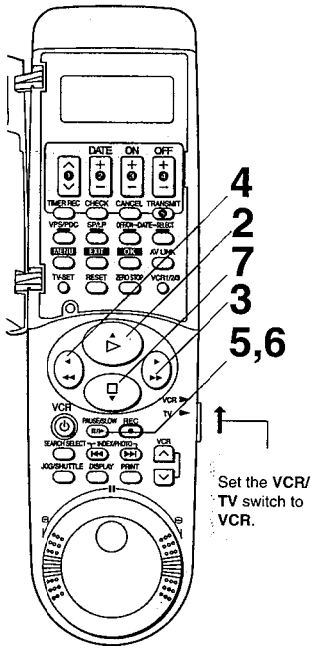
Download in progress, please wait.
Position 67

- When downloading from TV has finished, the programme of the station with the lowest channel number which can be tuned in is received automatically.

Note:
Download will only work when the VCR is connected to a TV with the "Q Link", "DATA LOGIC", "NEXTVIEWLINK", "Easy Link" "Megalogic", "SMARTLINK", or other logo using a fully-wired 21-pin scart cable.
When this condition is not met, Auto Setup will be executed. (See page 23.)

Playback

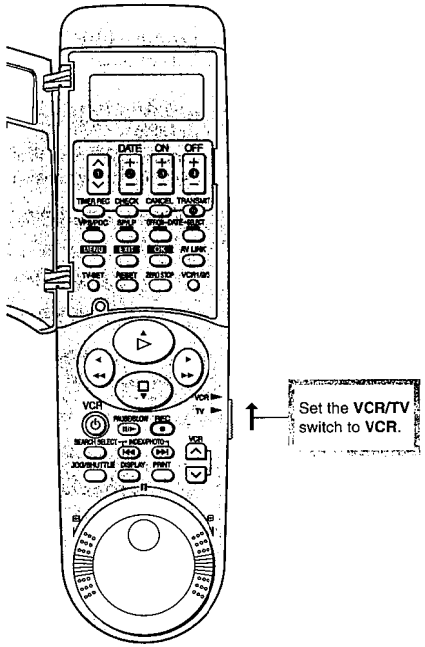


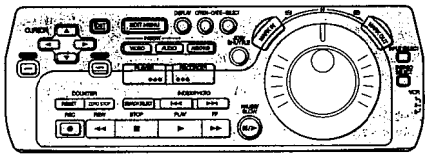


Operations	Display Symbols
1 Insert a recorded cassette tape (page 17).	
2 Press ▷ **(PLAY)** to start playback.	
3 Tap ▶▶ **(FAST FORWARD)** to search forward. • Press ▷ **(PLAY)** to change back to normal playback.	
4 Tap ◀◀ **(REWIND)** to search backward. • Press ▷ **(PLAY)** to change back to normal playback.	
5 Press **PAUSE/SLOW** to view a still picture. • Press ▷ **(PLAY)** or **PAUSE/SLOW** to continue normal playback.	
6 Keep **PAUSE/SLOW** pressed for 2 seconds or more to view a slow motion picture. • Press ▷ **(PLAY)** to continue normal playback.	
7 Press □ **(STOP)** to stop the picture.	

Note:
If you keep ▶▶ **(FAST FORWARD)** or ◀◀ **(REWIND)** pressed in step **3** or **4**, search playback is activated while the button is pressed, and operation returns to normal playback when the button is released.

Other Playback Functions

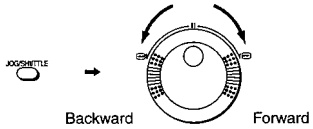




To Change the Playback Speed

1 Press **JOG/SHUTTLE** on the remote controller or the editing controller.
- The button on the editing controller is lit.

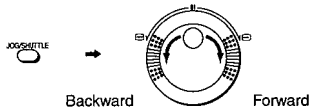
2 Rotate Shuttle Ring.



To Locate the Desired Picture Exactly

1 Press **JOG/SHUTTLE** on the remote controller or the editing controller.
- The button on the editing controller is lit.

2 Turn Jog dial.



To View the Video During Fast Forward or Rewind

Keep▶▶ **(FAST FORWARD)** pressed during fast forward.
Keep◀◀**(REWIND)** pressed during rewind.

To Return to a Specified Scene

After playback, press **ZERO STOP** in the stop mode.
- The tape will be rewound or fast forwarded to 0:00.00 approximately.
- During Time code display, this function will not work.

Automatic Playback

When a cassette with the opened record prevention tab is inserted, the VCR starts playback automatically.

VCR-off Playback

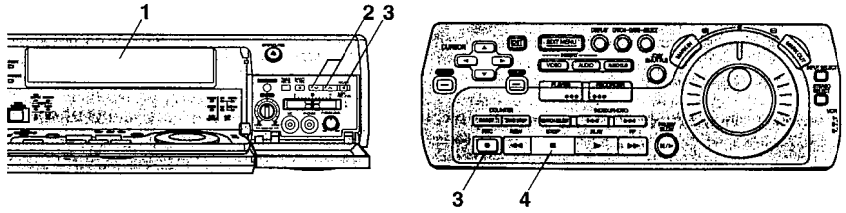
When the VCR is off, an inserted cassette can be played back by pressing ▷ **(PLAY).**

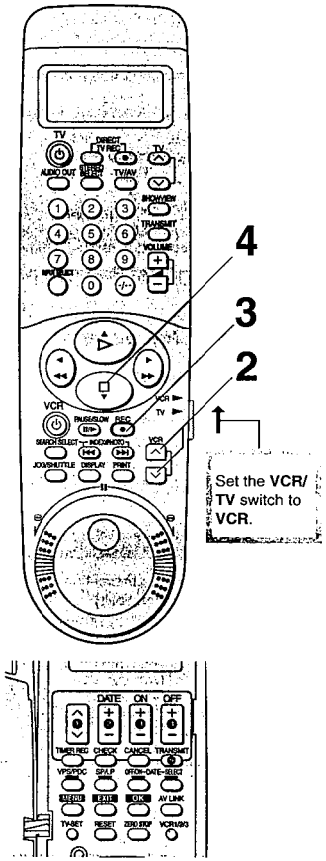
Automatic Rewinding

When the tape reaches the end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.
- During OTR, this function will not work.

Note:
Cue, review or slow playback will be automatically cancelled after 10 minutes, and still playback after 5 minutes.

Manual Recording



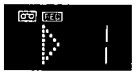


Operations **Display Symbols**

1 Insert a video cassette with the closed record prevention tab (page 17).
- If it has already been inserted, press **VCR ⏻ (POWER ⏻/I)** to turn the VCR on.

2 Select the TV station using the ∨ and ∧ buttons.
- It is also possible to select by pressing the **numeric buttons.** Be sure that the **VCR/TV** switch is set to **VCR.**

3 Press **REC (REC/OTR)** to start recording.



4 Press □ **(STOP)** to stop recording.

To Select the Desired Tape Speed

Press **SP/LP** before recording.

To Pause Recording

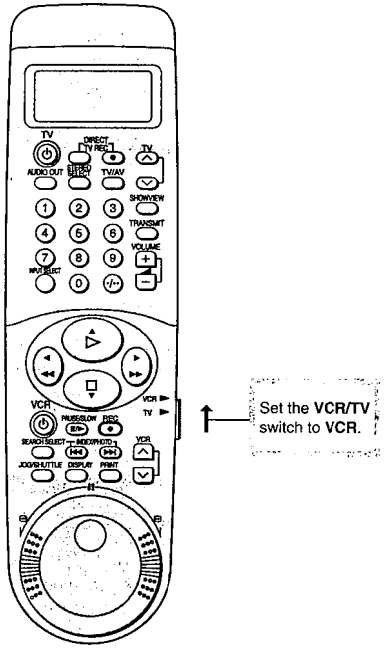
Press **PAUSE/SLOW** during recording.
Press again to continue recording.

To Select the Desired Audio Mode

Perform the procedure below using the editing controller.
1 Press **SET UP.**
2 Using ▲▼, select **Audio Mode** and press **OK.**
3 Using ◀▶, select **12bit** or **16bit,** then press **OK.**
For details, see Initial Settings for Editing on page 58.

To Record One TV Programme while Viewing Another Programme

After step **3,** change to the TV channel of the programme you want to view.



To Display the Remaining Tape Time

Press **DISPLAY** repeatedly until the Remaining Tape Time appears on the VCR display.

Clock → Time Code → Remaining Tape Time → Counter

- The remaining tape time may not be displayed correctly for some tapes.

Recording Stereo and Bilingual Programmes

1 Recording is automatically made in the stereo and bilingual mode. This prevents errors in the selection of the dubbed or the original language.

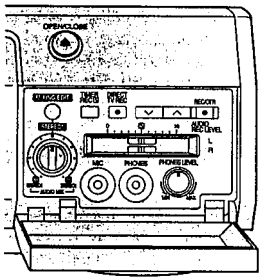
2 During playback press **AUDIO OUT** to select the desired sound mode. See page 8.

Notes:
- When a video cassette with the opened record prevention tab is inserted, the "OTR" indication will flash to indicate that recording is not possible.
- The recording pause mode will be automatically cancelled after 5 minutes and return to the stop mode.

The NICAM Broadcast System

AG-DV2700 is also equipped with the NICAM sound system.
NICAM is a 2 Channel sound broadcast system that provides either a high quality stereo sound track or 2 independent MONO sound tracks, M1 and M2.
NICAM programmes are always accompanied by standard sound broadcasts and you can select the desired sound with **AUDIO OUT** during playback.
- To record the regular sound (ordinary normal sound) on the FM audio tracks when a Stereo, Bilingual or NICAM programme is received, select **Mono ON** during manual tuning procedure. See page 40.

Important Note for the NICAM System
When AG-DV2700 is switched on, the tuner will automatically switch to a NICAM broadcast, if NICAM is being transmitted. During test transmissions, it is possible that the sound received doesn't correspond to the picture being viewed. In order to receive a synchronized sound and picture, select **Mono ON** setting. This will only apply until NICAM transmissions are fully operational.
Even if the sound track is in MONO, the stereo indicator will appear.



One-Touch Recording (OTR)

This function only works using REC/OTR on the VCR main unit.

After you start recording, you can use this function to stop recording automatically when the programme is finished (useful for recording when you are out). Simply set the recording duration by pressing **REC/OTR** repeatedly.
The duration indicated on the VCR display changes by pressing **REC/OTR** as follows:

Counter display (normal recording mode) → 30 (min.) → 60 (min.) → 120 (min.) → 180 (min.) → 240 (min.) → Counter display

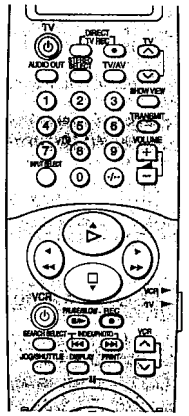
Preparation

Insert a video cassette with the closed record prevention tab.

Operations

1 Set the video source which is to be recorded, and start recording.
2 Press **REC/OTR** repeatedly to select the desired recording duration.
- The VCR will automatically switch off when OTR is completed. To turn the VCR on again, press **VCR ⏻ (POWER ⏻/I).**

Notes:
- The OTR function works during normal recording or Direct TV REC.
- When the tape reaches the end during OTR, the VCR will turn itself off.
- To stop OTR at any time, press □ **(STOP)** or **VCR ⏻ (POWER ⏻/I).**



Direct TV REC

This function allows you to immediately record the programme you are watching on the TV at the moment by simply pressing **DIRECT TV REC.**
However, this function works only when this VCR is connected to a TV with the "Q Link", "DATA LOGIC", "NEXTVIEWLINK", "Easy Link", "Megalogic", "SMARTLINK", or other logo using the fully-wired 21-pin scart cable.

Preparation

Insert a video cassette with the closed record prevention tab.

Operation

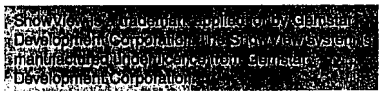
When you are watching TV and you want to record the programme immediately, press **DIRECT TV REC** on the VCR main unit or remote controller.
The recording will start.
- It is not necessary to adjust the programme position of your VCR to the TV station that you are watching now.

Notes:
- Even if the programme positions are not the same, the programme position of the VCR switches to the same position of the TV. When recording is finished, the programme position of the VCR returns to the previous position.
- Do not press **AV LINK** during Direct TV REC. Recording may not be performed normally.
- In some cases, it may not be possible to change the TV channel during Direct TV REC.
- Check beforehand whether the tape may be used for recording.

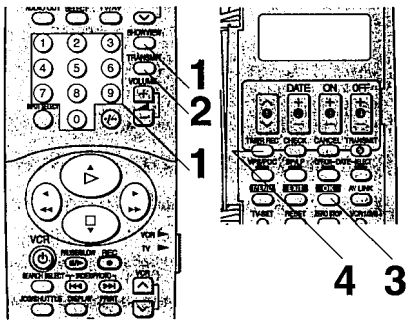
Timer Recording

Timer Recording
This function allows you to record programmes automatically.
There are three ways to record programmes: ShowView programming, where you enter the ShowView number, and On Screen Display recording, where you enter the recording information yourself while viewing the On Screen Display.

ShowView Programming
Programming is now easier than ever: simply enter the ShowView number provided in the programme schedule carried by newspapers and magazines.
ShowView numbers are numbers which are assigned to each programme listed in the TV programme schedule carried in newspapers and TV guides. When these numbers are entered and **TRANSMIT** is pressed, the numbers are converted to the actual programming.



Preparations
- Insert a video cassette with the closed record prevention tab.
- Confirm that the TV is on and the VCR viewing channel is selected.



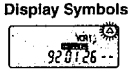
Follow the on screen operation guide.

Operations

1 Press **SHOWVIEW** and then enter a ShowView number using the **numeric buttons**.

Example: 920126

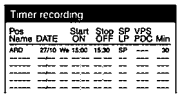
Display Symbols



- If you have entered the wrong ShowView number, repeat step **1** with the correct ShowView number.

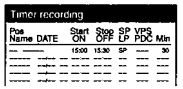
2 Press **TRANSMIT**.

TRANSMIT



- The Programming data that you entered also appears on the VCR display.
- To extend the ending time or to make any corrections, use ▲ ▼ ◄ ► or **VPS/PDC**.
- See page 35 for VPS/PDC recording.

If "– –" appears in the programme position:
Use ▲ or ▼ to select the programme position of your VCR which receives the required TV station.



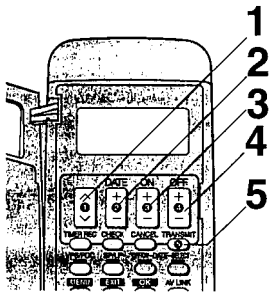
- A message appears on the On Screen Display for the first few seconds.
- [⏲] flashes as a warning on the VCR display.
- Once programming is performed after the programme position has been selected here, the guide channel will be automatically stored so that the correct position will appear when the ShowView code for this station is next entered.

3 Press **OK** for confirmation.

4 Press **TIMER REC** to activate timer recording.
- Check that [⏲] is lit on the VCR display. If it is flashing, check the timer recording details again. (See page 34.)

Notes:
- To select the desired tape speed, press **SP/LP** in step **1**.
- To cancel standby mode, press **TIMER REC**.
- When the ShowView number is used for programming, the recording time may be slightly longer than the actual programme time.
- When programming the recording of two or more programmes, repeat steps **1-3**.
- The procedures for checking, modifying and cancelling a timer programme are the same as on page 34.

Using the Remote Controller



Preparations
- Insert a video cassette with the closed record prevention tab.
- Confirm that the TV is on and the VCR viewing channel is selected.

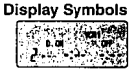
For Example:

Programme position (channel):	2
Date:	27th October
Starting time:	20:00
Ending time:	21:00
(Present date:16th October)	

Operations

1 Set the programme position (channel) to "2".

Display Symbols



2 Set the date to "27/10".

DATE

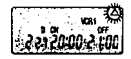
3 Set the starting time to "20:00".

ON

- When it is kept pressed, the indication changes in 30-minute intervals.

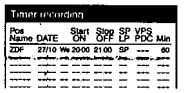
4 Set the ending time to "21:00".

OFF



5 Press **TRANSMIT**.

TRANSMIT



- To release from the standby mode, press **TIMER REC**.
- See page 35 for VPS/PDC recording.
- To make a change to what has been programmed (for instance, to change VPS/PDC to **ON** or **OFF**), follow the procedure for On Screen Display Programming. (See page 33.)

Note:
To select the desired tape speed, press **SP/LP** in any of steps **2-4**.

Weekly Timer Recording
In step **2**, select the desired day by pressing **DATE (–)**.
(SU=Sunday, MO=Monday, TU=Tuesday, WE=Wednesday, TH=Thursday, FR=Friday, SA=Saturday)

Daily Timer Recording
For this timer function, several groups of days can be selected.
Ⓐ Daily recording from Monday to Friday (MO-FR)
Ⓑ Daily recording from Monday to Saturday (MO-SA)
Ⓒ Daily recording from Sunday to Saturday (SU-SA)
In step **2**, select the desired days by pressing **DATE (–)**.

Timer Recording from External Signal Source
If Timer Recording is performed by a unit connected to AV1 (TV), AV2(EXT/DECODER) socket or AV3 (Audio/Video/S-Video input sockets), select A1, A2 or A3 for the programme position.
- A1: Through the AV1 (TV) socket.
- A2: Through the AV2 (EXT/DECODER) socket.
- A3: Through the AV3 (AUDIO IN/VIDEO IN/S-VIDEO IN) sockets on front panel.

- Timer Recording is not possible if DV IN is set to the programme position.

Using On Screen Display

Up to 8 timer programmes can be recorded up to one month in advance by setting the timer, including weekly and daily programmes.

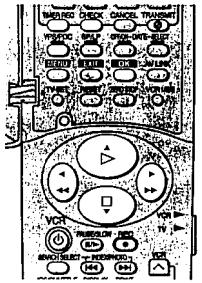
Preparations

- Insert a video cassette with the closed record prevention tab.
- Confirm that the TV is on and the VCR viewing channel is selected.

For Example:

Programme position (channel):	2
Date:	27th October
Starting time:	20:00
Ending time:	21:00

(Present date:16th October)



Set the **VCR/TV** switch to **VCR**.

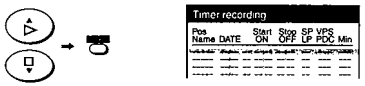
Follow the on screen operation guide.

Operations

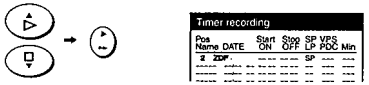
1 Press **CHECK**.

2 Select the unoccupied position, and then press **OK**.

On Screen Display

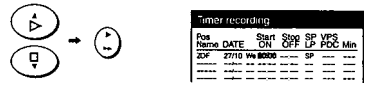


3 Set the programme position (channel) to "2".



4 Set the date to "27/10".

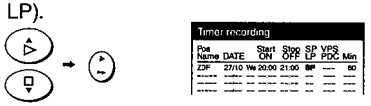
5 Set the starting time to "20:00".



- When it is kept pressed, the indication changes in 30-minute intervals.

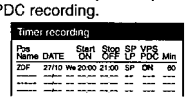
6 Set the ending time to "21:00".

7 Select the desired Tape speed (SP/LP).



8 Set **VPS/PDC** to **ON** or **OFF** (– – –).

- See page 35 for VPS/PDC recording.



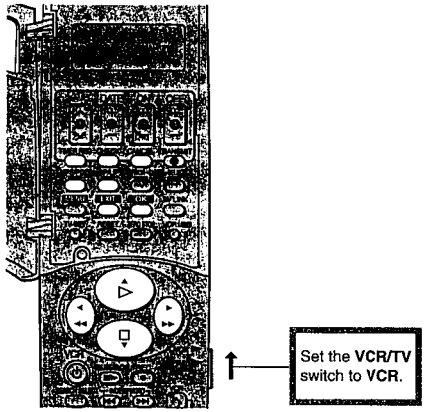
9 Press **OK** for confirmation.

10 Press **TIMER REC** to activate timer recording.

- When the On Screen Display for programming timer recording turns off, the recording information is automatically sorted in the order of recording start times.
- Check that ⏲ is lit on the VCR display. If it is flashing, check the timer recording details again. (See page 34.)

Note:

To cancel from the standby mode, press **TIMER REC**.



Set the **VCR/TV** switch to **VCR**.

Weekly Timer Recording

In step **4**, select the desired day by pressing ▼.
(Su=Sunday, Mo=Monday, Tu=Tuesday, We=Wednesday, Th=Thursday, Fr=Friday, Sa=Saturday)

Daily Timer Recording

For this timer function, several groups of days can be selected.

Ⓐ Daily recording from Monday to Friday (Mo-Fr)
Ⓑ Daily recording from Monday to Saturday (Mo-Sa)
Ⓒ Daily recording from Sunday to Saturday (Su-Sa)

In step **4**, select the desired days by pressing ▼.

Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to AV1 (TV), AV2(EXT/DECODER) socket or AV3 (Audio/Video/S-Video input sockets), select A1, A2 or A3 for the programme position.

- A1: Through the AV1 (TV) socket.
- A2: Through the AV2 (EXT/DECODER) socket.
- A3: Through the AV3 (AUDIO IN/VIDEO IN/S-VIDEO IN) sockets on front panel.

- It is also possible to select by pressing **INPUT SELECT**.
- Timer Recording is not possible if DV IN is set to the programme position.

Setting other Programmes

Repeat steps **2-9** on page 33.

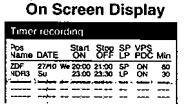
Checking a Timer Programme

Confirm that the TV is on and the VCR viewing channel is selected.

1 Press **CHECK**.
- The On Screen Display may be distorted in the VPS/PDC recording standby mode.

2 Press **CHECK** or **EXIT** to exit the On Screen Display.

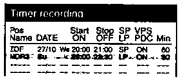
On Screen Display



Modifying a Timer Programme

- During timer recording, this operation will not work.
- Confirm that the TV is on and the VCR viewing channel is selected.

1 Press **CHECK**.



2 Select the desired timer programme.

3 Modify the programme, following the method described in steps **2-8** on page 33.

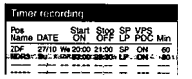
4 Press **OK**.

5 Press **CHECK** or **EXIT** to exit the On Screen Display.

Cancelling a Timer Programme

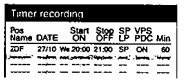
- During timer recording, this operation will not work.
- Confirm that the TV is on and the VCR viewing channel is selected.

1 Press **CHECK**.



2 Select the desired timer programme.

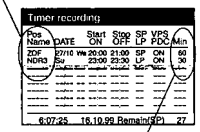
3 Press **CANCEL**.



4 Press **CHECK** or **EXIT** to exit the On Screen Display.

Notes:

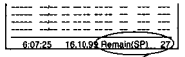
- If timer recording does not reach the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be erased from the memory by 4 a.m. the next day.
- Either the position number or the station name is displayed here.



- For daily and weekly timer recording, the recording time for only one recording session is displayed.

Checking the Remaining Tape Time

- This displays the remaining time for the inserted tape.



Remainig time indicator

- This indicator is not displayed unless the remaining tape time has already been indicated on the VCR display. Refer to page 29.

VPS (Video Programme System)/PDC (Programme Delivery Control)

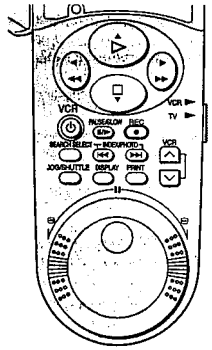
The Video Programme System (VPS) or the Programme Delivery Control (PDC) is a very convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time differs from the scheduled time due to delayed start or extension of the programme duration. Also, if a programme is interrupted and, for example, some special news is inserted, the recording will also be interrupted automatically and resumed when the programme continues.
Depending on the signals sent from the broadcasting stations, the VPS/PDC system may not operate properly even when VPS/PDC has been set to ON. Please check with the broadcasters in your area for details.

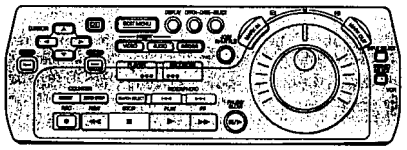
- In the case of VPS/PDC recording, use the correct time (VPS/PDC time) for recording the TV programmes.
  Set VPS/PDC to OFF when the recording time is not the correct time (VPS/PDC time).
  VPS/PDC recording is not performed when the time (VPS/PDC time) is incorrect, even if only by one minute.
  To find out the correct time (VPS/PDC time), consult a newspaper or magazine, or other source.
- If the actual broadcasting times of timer recordings overlap (regardless of whether they are VPS/PDC controlled), the recording that starts first always has priority, and the recording of the later beginning programme will start only after the first timer recording has finished.
- When the VPS/PDC signal drops out because the broadcast signal is weak, or when a broadcasting station does not transmit a regular VPS/PDC signal, the timer recording will be performed in the normal mode (without VPS/PDC) even if it was programmed for VPS/PDC.
  In this case, even if the timer recording is performed, whatever has been programmed will not be cancelled at that particular time but at 4 a.m. on the following day.
- The start times of scheduled programmes listed in the newspaper or magazine may be changed at a later date. Set VPS/PDC to OFF when programming a programme whose start time has been subsequently changed. Particular care must be taken in this respect with ShowView programming since VPS/PDC is automatically set to ON in some countries.
- If a programme listed in a newspaper or magazine has two ShowView numbers, use the ShowView number for VPS/PDC if you wish to proceed with VPS/PDC recording using ShowView programming.
- The default settings for VPS/PDC differ depending on the country concerned. Refer to the table below.

Programming method / Selected Country	ShowView programming	Changes in ShowView programming start time	Non-ShowView programming
France, Belgium, Netherlands, Sweden, Denmark, Finland, Norway	ON	OFF	OFF
Germany, Switzerland, Austria, other countries	ON	ON	ON
Italy, Spain, Portugal	OFF	OFF	OFF

- "– – –" appears for the VPS/PDC item at the outset if the broadcasting station is not transmitting VPS/PDC signals.

Search Functions





Index Search System

It is easy to find the beginning of each recording because a special index signal is recorded at the start of each recorded segment on the tape.

For example:
Searching for the 2nd recorded segment in the forward direction.

1 Press **SEARCH SELECT** so that "– –" appears on the VCR display.
(This operation is performed while the VCR is in the stop mode or normal playback mode.)

2 Press **INDEX/PHOTO ▶▶I** twice.
- After finding the specific recorded segment, playback starts automatically.

Display Symbols

To stop the operation at any time
Press □ **(STOP)**.

- For the reverse direction, press **INDEX/PHOTO I◀◀**.
- Up to 20 index signals can be searched for in either direction.
- When the opposite **INDEX/PHOTO** is pressed, the number shall be decreased until 1 is reached.
- The figure on the display is reduced by 1 each time an index signal is located.
- The INDEX search function can only work correctly if the index signals are spaced at least 5 minutes apart.
- Repeat the procedure if the index signal for the specified number is not found.

Recording Index Signals
Index signals are recorded in the following cases.
- When a recording is started by pressing **REC (REC/OTR)**.
- When timer recording is activated.
- When **REC** on the remote controller or the editing controller is pressed during recording.

Photoshot Index Search System

Photo shot index signals are automatically recorded when a Panasonic Digital Video Camera is used for photo shot mode. Photo shot images are searched using these signals, and when such an image is located, the image is played back as a still picture.

For example:
Searching for the 2nd photo shot image in the forward direction.

1 Press **SEARCH SELECT** so that "P – –" appears on the VCR display.

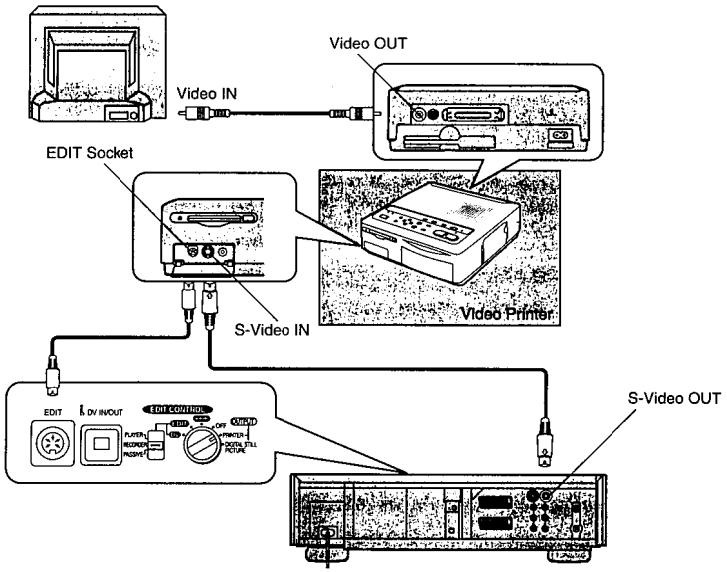
2 Press **INDEX/PHOTO ▶▶I** twice.
- The image to be viewed will be found.

Display Symbols

- For the reverse direction, press **INDEX/PHOTO I◀◀**.
- Any of up to 20 images ahead on the tape can be designated.
- When the opposite **INDEX/PHOTO** is pressed, the number shall be decreased until 1 is reached.
- The figure on the display is reduced by 1 each time an index signal is located.
- It may not be possible to search for a particular image properly if photo shot images have been recorded continuously.
- At every press of the corresponding button, the tape is fast-forwarded or rewound to the next still picture recorded in the Photoshot Mode.
  After reaching the next still picture, the still picture is played back continually together with the sound (only for approx. 4 seconds).

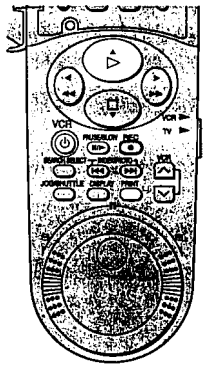
Using the VCR with a Video Printer

Still pictures can easily be printed out when the VCR is connected to a Panasonic video printer equipped with an EDIT socket.



Preparation

- Connect a video printer to this VCR as shown.



Video Printer:

1 Turn the Video Printer on.
2 Make the necessary settings on the Video Printer according to the input signal.

VCR:

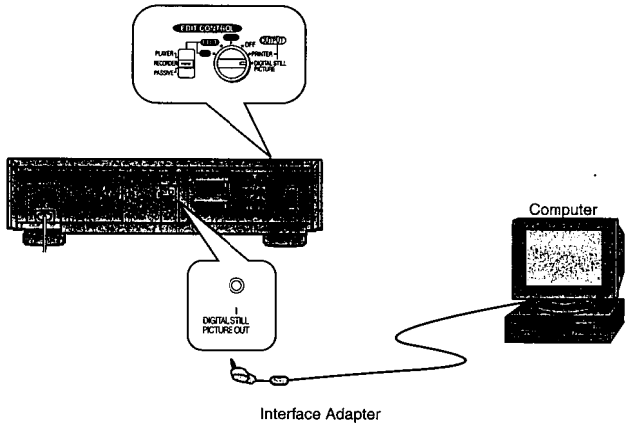
3 Turn the VCR on.
4 Set **EDIT CONTROL** to **PRINTER.**
5 Press ▷ **(PLAY).**
6 Search for the picture from which you would like to print, and then press **PAUSE/SLOW.**
7 Press **PRINT.**

Notes:

- Read the operating Instructions of the Video Printer.
- The OSD and DATE/TIME display are also printed out. If a picture without these displays is required, proceed as follows.
  - Set OSD on the VCR's Main menu to OFF.
  - Press **DATE-OFF/ON** on the remote controller or editing controller.
- Printing cannot be stopped at any point in time until it is completed.
- For printing, screens cannot be divided and the zoom function cannot be used.

Using the VCR with a Computer

The Personal Computer Connection Kit VW-DTA1E (Optional) for Digital Video Equipment makes it possible to connect the VCR to a computer and transmit still video images to it.



Computer System Requirements

DV STUDIO can be installed in a PC/AT personal computer which can run Microsoft® Windows® 95.

Compatible machines:	Personal computer with 80486DX4 or higher CPU(Pentium™ or higher recommended)
Graphic card:	True Color (approx.16.7million colours) recommended (operation also possible even with 256 colours)
Installed memory:	16 MB or more (32 MB or more recommended)
Free hard disk space:	At least 10 MB
Disk drive:	CD-ROM drive
Serial port:	RS-232C (D-Sub 9pin)
Other requirements:	Mouse

To connect the VCR to the computer, use the special Interface Adaptor contained in the Personal Computer Connection Kit.

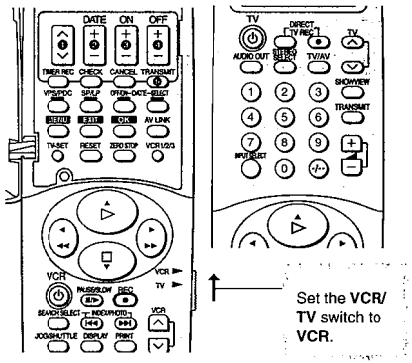
- Pictures that you intend to import into a computer application should be recorded in the SP Mode.
- When recording, take care that the Time code is uninterrupted from the beginning of the tape.
- Windows® 95 is a trademark of Microsoft Corporation U.S.A.
- Pentium™ is a trademark of Intel Corporation.
- All other company and product names in the operating instructions are trademarks of their respective corporations.

Storing TV Stations into Your VCR

The VCR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 99 TV broadcast stations.
If VCR is not correctly tuned by Auto Setup, follow the procedure below.

Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Turn on the VCR.



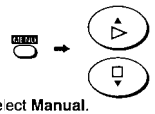
Manual Tuning Procedure

Follow the on screen operation guide.

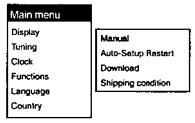
When deleting stations, adding "blank" positions and changing (moving) the programme position:

These indications do not appear on the screen after performing Preset Download (Download).

1 Press **MENU** and select **Tuning**.

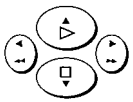


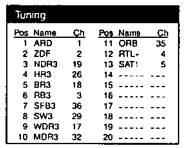
On Screen Display



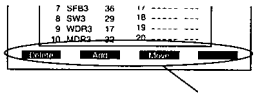
2 Select **Manual**.

3 Select the desired programme position.





4 Follow the steps indicated below.



Delete: Press **VPS/PDC** (red) to delete the station.
Add: Press **SP/LP** (green) to add a blank position
Move: Press **DATE-OFF/ON** (yellow) to change (move) the programme position.

- The blue indication represents no function.
- These indications do not appear after performing Preset Download (Download).

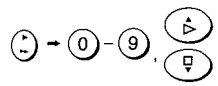
5 Press **OK**, and then press **EXIT**.

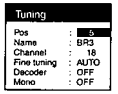
Changing the Programme Position (Pos)

Follow **1** to **3** in the first procedure.

4 Press **OK** and then select **Pos**.

- Be sure that the **VCR/TV** switch is set to **VCR**.





5 Press **OK** to confirm.

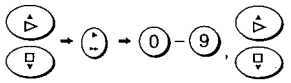
6 Press **MENU**, and then press **EXIT**.

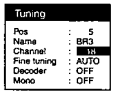
Changing the Channel (Channel)

Follow **1** to **3** in the first procedure.

4 Press **OK** and then select **Channel**.

- Be sure that the **VCR/TV** switch is set to **VCR**.





5 Press **OK** to confirm.

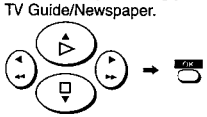
6 Press **MENU**, and then press **EXIT**.

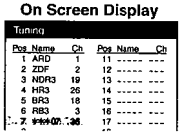
Changing the Station name (Name)

Follow steps **1** to **2** on page 39.

3 Select the station(s) name ∗□□□□.
Establish which channel you are viewing by checking your TV Guide/Newspaper.

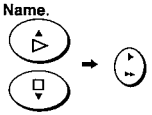
On Screen Display

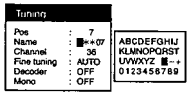




- "□" indicates the position number or station name. This is the same as steps **4** and **5**.

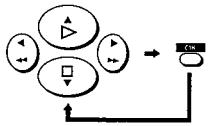
4 Select **Name**.





Enter characters into all five ∗□□□□ positions from the table using the arrows and press **OK** after each character. Use a blank space if required. To enter a blank, select the area between Z and ∗.

- To cancel during entry, press **EXIT**.
The characters that have been entered will remain as the station name. Enter the correct station name as failure to do so may result in malfunctioning.



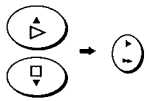
5 Press **MENU**. If any other station names are marked ∗□□□□, repeat steps **3**-**5**.

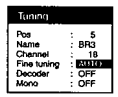
6 Press **EXIT**.

Fine Tuning

Follow steps **1** to **3** on page 39.

4 Press **OK** and then select **Fine tuning**.





5 Press ▲ or ▼ to obtain the best tuning condition.

- To return the tuning to its former state **(AUTO)**, press ▶.

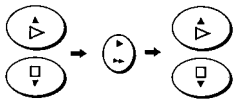
6 Press **OK** to confirm.

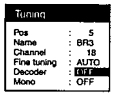
7 Press **MENU**, and then press **EXIT**.

Decoder

Follow steps **1** to **3** on page 39.

4 Press **OK** and then select **Decoder ON** or **Decoder OFF**.
ON: To preset pay TV stations.
OFF: To preset normal TV stations.





5 Press **OK** to confirm.

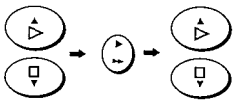
6 Press **MENU**, and then press **EXIT**.

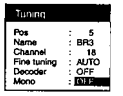
Changing the Recording Sound (Mono)

Follow steps **1** to **3** on page 39.

4 Press **OK** and then select **Mono OFF**.

- Select **Mono ON** to record the normal sound during a stereo, bilingual or NICAM broadcast or if the stereo sound is distorted due to inferior reception conditions.





5 Press **OK** to confirm.

6 Press **MENU**, and then press **EXIT**.

Notes:
- When channels have been set with Manual Tuning, the channel position will need to be entered the first time ShowView is used.
- If you change the tuning details of the TV after Manual Tuning has been performed on the VCR, the new information may be automatically downloaded to the VCR, and the input content of Manual Tuning may be erased. If this happens, perform VCR Auto Setup or Downloading and then repeat Manual Tuning.

Channel Plan

Channel Indication	TV Channel Germany/Italy	TV Channel Other Countries
2-12	*E2-E12	E2-E12
13-20	A-H (Only Italy)	–
21-69	21-69	21-69
74-78	S01-S05	S1-5
80-82	S1-S3	M1-M3
83-89	S4-S10	M4-M10
90-99	S11-S20	U1-U10
121-141 Hyperband	**S21-S41	S21-S41

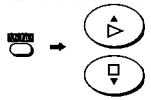
*In Italy: H1...(11), H2...(12)
**Only for 8 MHz channel raster

- This channel plan has been designed for continental Eurcpe, and may differ according to the region.

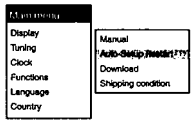
Auto-Setup Restart

When your address changes, follow the procedure below.

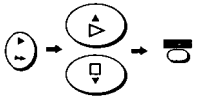
1 Press **MENU** and select **Tuning**.



On Screen Display



2 Select **Auto-Setup Restart** and press **OK**.

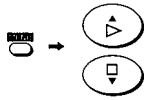


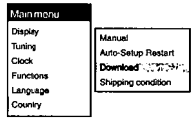
3 Press **OK** again.

Download

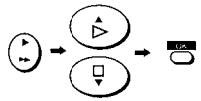
To perform downloading again, follow the procedure below in the stop mode.

1 Press **MENU** and select **Tuning**.

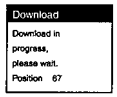




2 Select **Download** and press **OK**.



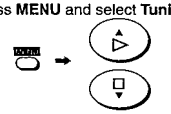
3 Press **OK** again.

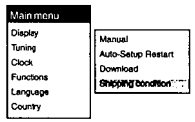


Shipping Condition

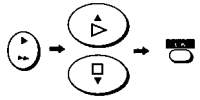
If you want to return the VCR to the factory-preset condition, follow the procedure below.

1 Press **MENU** and select **Tuning**.





2 Select **Shipping condition** and press **OK**.



3 Press **OK** twice.

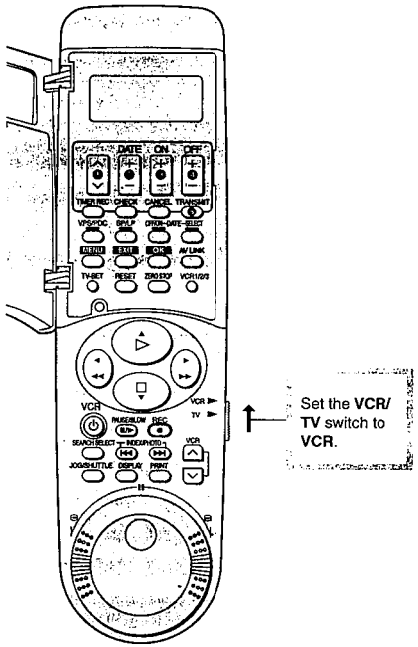
Note:
To re-tune the VCR, disconnect and then reconnect the mains lead.

Setting the Clock of Your VCR

The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.
The built-in digital clock employs the 24-hour system.
If VCR is not correctly set by Auto Setup, follow the procedure below.
The clock backup system operates for at least 60 minutes in the event of power failure.

Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Turn on the VCR.



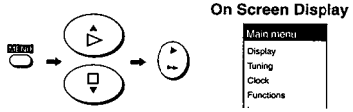
Manual Clock Setting

Follow the on screen operation guide.

Operations

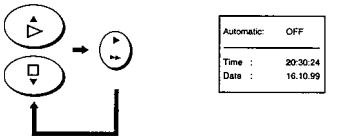
1 Press **MENU**, and then select **Clock**.

On Screen Display



2 Check that the **Automatic** setting is **OFF**, then press **OK**.
- If the setting is **ON** when you open the On Screen Display, do not turn it **OFF**, as then you will not be able to set the time automatically.

3 Set **Time** and **Date**.
- Press ◄ to return to the previous item.



4 Press **OK** to confirm.

5 Press **EXIT**.

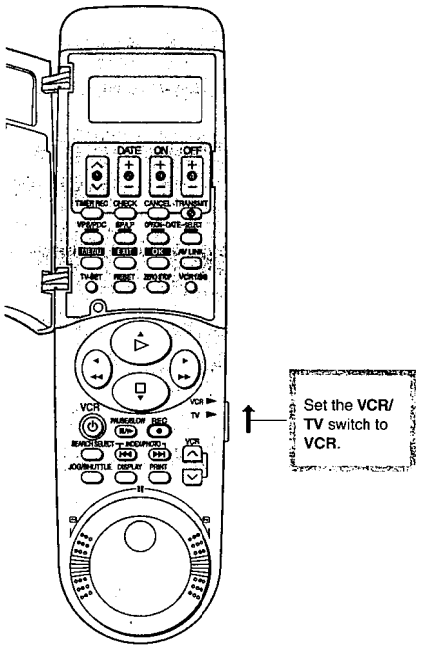
Note:
When the Automatic setting is **OFF**, the time may become incorrect. If this happens, reset it following the method described above.

Automatic Clock Setting

When "**Automatic**" is set to **ON**, the automatic time correcting function is activated every day.
The automatic time correcting function is only activated when the power is off.
This function is not activated during timer recording standby mode.

Note:
Even if "**Automatic**" is set to **ON**, if the time is incorrect, check first that the country has been selected correctly (see page 46), re-set "**Automatic**" to **ON** following step **2**, then always press **OK**.

Settings Using On Screen Display



The VCR indications shown on the TV screen are known as the On Screen Display (OSD).
This VCR allows many settings to be made at the OSD.

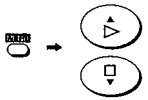
Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Turn on the VCR and TV.

Display

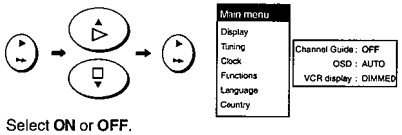
Channel Guide

1 Press **MENU**, and then select **Display**.

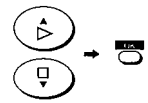


2 Select **Channel Guide**.

On Screen Display

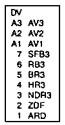


3 Select **ON** or **OFF**.



ON: The Channel Guide will appear for a few seconds each time the channel is changed with ∨/∧.

OFF: The Channel Guide will not appear.

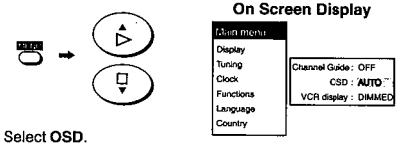


4 Press **EXIT** to exit the On Screen Display.

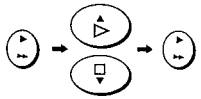
OSD

1 Press **MENU**, and then select **Display**.

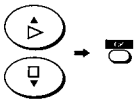
On Screen Display



2 Select **OSD**.



3 Select **AUTO, ON** or **OFF**.



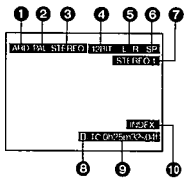
AUTO: The On Screen Display will appear on the TV screen for a few seconds when you operate the VCR.

ON: The On Screen Display will always appear on the TV screen when you perform the VCR.

OFF: The On Screen Display will not appear.

4 Press **EXIT** to exit the On Screen Display.

To use the On Screen Display:



❶ TV station

❷ Video system

❸ STEREO, M1 or M2 Indicator
When receiving a TV programme with the Stereo, Bilingual or NICAM sound system, the type of sound system in which it is broadcast is automatically indicated.

STEREO: When receiving a Stereo/NICAM stereo broadcast.

M1/M2: When receiving a Bilingual/NICAM dual-sound broadcast.

M1: When receiving a NICAM monaural broadcast.

❹ Audio Data Indicator

❺ Audio Output Mode Indicator
The Left (L) and Right (R) Indicators show which sound mode is selected with **AUDIO OUT** (see page 8).

Stereo: Both the L and R Indicators appear.
Left: The L Indicator appears.
Right: The R Indicator appears.

❻ Tape speed Indicator

❼ Audio Monitor Indicator
STEREO1: 12bit STEREO1 sound
STEREO2: 12bit STEREO2 sound
MIX: STEREO1 and STEREO2 mixed sound

❽ Tape running display

Stop, Eject	□
Rewind	◀◀
Fast Forward	▶▶
Playback	▶
Reverse Playback	◀
Reverse Slow Playback	◀I
Slow Playback	I▶
Still Playback, Pause	II
Recording	●

❾ Present time/Time code/Remaining tape time/ Tape counter/Index/Photoshot Index Search/ One-Touch Recording (OTR)

Present time	17:24:31
Time code	TC 0h25m32s04f
Remaining tape time	REMAIN: 1:16
Tape counter	−1:35.47
Index/Photoshot index Search	▶▶ 02
One-Touch Recording (OTR)	OTR 60

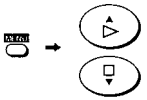
❿ Index/Photoshot Index Search Indicator

Notes:

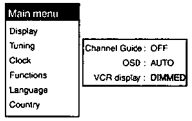
- When the item **OSD** is set to **OFF**, the On Screen Display will not appear.
- When the AV position (A1, A2, A3 or DV IN) has been selected or during playback, the On Screen Displays (❶,❷,❸) do not appear.
- On Screen Display is not displayed when the SET UP or EDIT MENU screen is displayed.
- On Screen Display (❼) is not displayed while playing a tape that was recorded in 16bit audio mode.
- When a wide-display TV is used as a monitor, parts of the On Screen Display may not be visible depending on the type of broadcast (16:9, PAL Plus) received.

VCR display

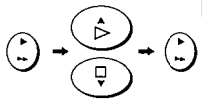
1 Press **MENU**, and then select **Display**.



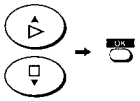
On Screen Display



2 Select **VCR display**.



3 Select **ON**, **OFF** or **DIMMED**.



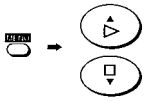
ON: When VCR is turned off, the characters are lit in the VCR display.
OFF: When VCR is turned off, the characters are not lit in the VCR display.
DIMMED: When VCR is turned off, the characters are dimmed in the VCR display.

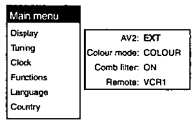
4 Press **EXIT** to exit the On Screen Display.

Functions

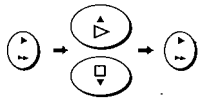
AV2

1 Press **MENU**, and then select **Functions**.

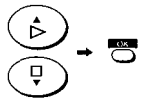




2 Select **AV2**.



3 Select **EXT** or **DECODER**.

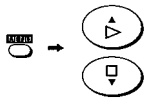


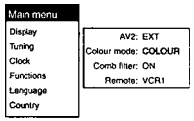
EXT: When another VCR or a satellite receiver is connected to the AV2 (EXT/DECODER) socket.
DECODER: When the decoder is connected to the AV2 (EXT/DECODER) socket.

4 Press **EXIT** to exit the On Screen Display.

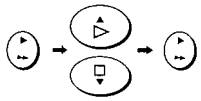
To Set the Colour Mode

1 Press **MENU**, and then select **Functions**.

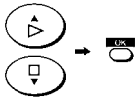




2 Select **Colour mode**.



3 Select **COLOUR** or **B/W**.



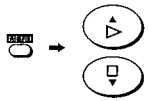
COLOUR: When performing recording and playback in colour.
B/W: When performing recording and playback in black-and-white.

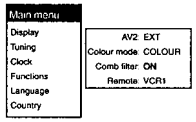
4 Press **EXIT** to exit the On Screen Display.

Note:
When **Colour mode** is set to **B/W**, the On Screen Display will be displayed in black-and-white.

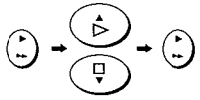
Comb filter

1 Press **MENU**, and then select **Functions**.

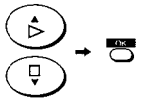




2 Select **Comb filter**.



3 Select **ON** or **OFF**.

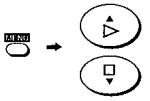


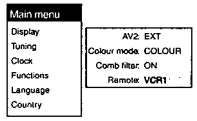
ON: Set to increase detail. Normally set to this position.
OFF: Set to reduce picture noise.

4 Press **EXIT** to exit the On Screen Display.

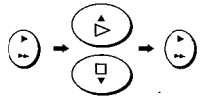
To Set the Remote mode

1 Press **MENU**, and then select **Functions**.

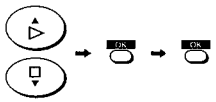




2 Select **Remote**.



3 Select **VCR1**, **VCR2** or **VCR3**.

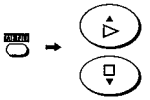


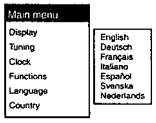
This allows the remote controller to be set for operating VCR1, VCR2 or VCR3.
- When changing the remote control mode, press **VCR1/2/3** to change the remote control mode of the remote controller. If this is not done, it will not be possible to operate the VCR using the remote controller.

4 Press **EXIT** to exit the On Screen Display.

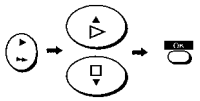
Language

1 Press **MENU**, and then select **Language**.





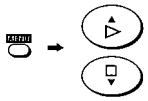
2 Select the desired language.

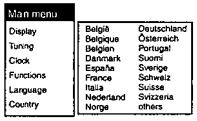


3 Press **EXIT** to exit the On Screen Display.

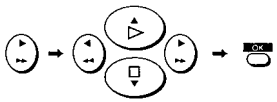
Country

1 Press **MENU**, and then select **Country**.





2 Select the desired country.



3 Press **EXIT** to exit the On Screen Display.

Editing Functions

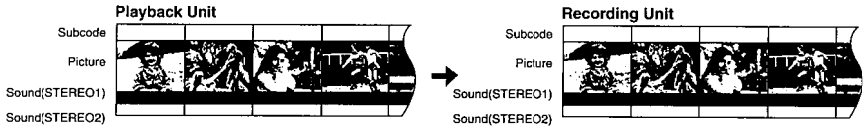
Using this VCR, 4 types of **One-Touch-Edit**, 3 types of **Manual Editing** and 3 types of **Programme Editing** can be selected.
In Programme Editing, after setting the edit start/end point, editing can be performed automatically. Edit programmes can be set up to 10 scenes for each editing function (40 scenes for Assemble editing).

One-Touch-Edit
- Assemble Editing **(page 62)**
- Insert Editing (Video, Audio, AV) **(page 64)**
- Audio Dubbing **(page 64)**
- Audio Mixing **(page 66)**

Manual Editing
- Copying **(page 68)**
- Insert Editing (Video, Audio, AV) **(page 70)**
- Audio Dubbing **(page 72)**

Programme Editing
- Assemble Editing **(page 74)**
- Insert Editing (Video, Audio, AV) **(page 78)**
- Audio Dubbing **(page 82)**

Copying
Allows the re-recording (copying) of the picture and sound from one tape onto another tape.

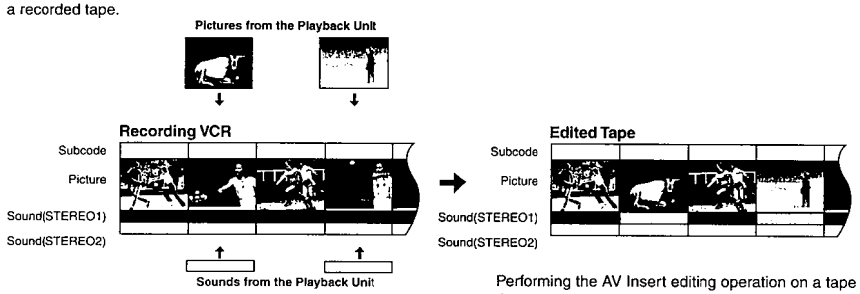


Performing the Copying operation on a tape that was recorded in 12bit audio mode.

Video Insert
Allows the partial replacement of the picture on a recorded tape. Sound is left in its original state.

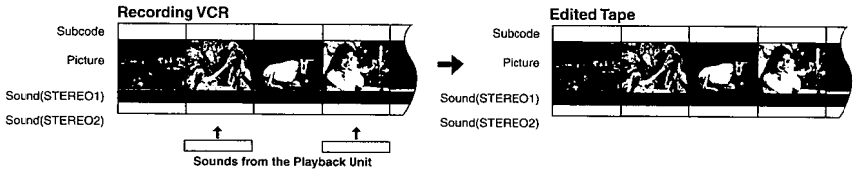
Audio Insert
Allows the partial replacement of sound on a recorded tape. Picture is left in its original state.

AV Insert
Allows the partial replacement of the picture and sound on a recorded tape.



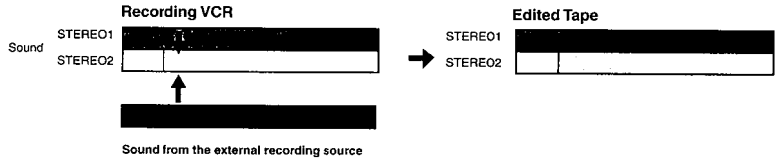
Performing the AV Insert editing operation on a tape that was recorded in 12bit audio mode.

Audio Dubbing
Allows the addition of the new sound on the STEREO2 track of a recorded tape. The original sound is left on the STEREO1 track.

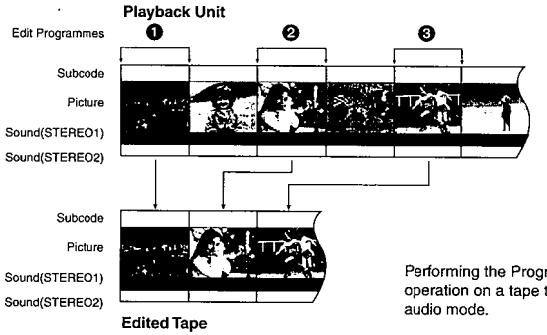


Performing the Audio Dubbing operation on a tape that was recorded in 12bit audio mode.

Audio Mixing
Allows the mixing of the the original sound on the STEREO1 track with the new sound from the external recording source and recording the mixed sound on the STEREO2 track of a recorded tape. The original sound is left on the STEREO1 track.



Assemble Editing
Allows the required scenes (picture and sound) to be picked up from a recorded tape and recorded in any desired order onto another tape.



Performing the Programme Assemble editing operation on a tape that was recorded in 12bit audio mode.

Creating the Tapes For Editing

In order to operate editing functions correctly, use these tapes for editing as follows:

- **Tape on which the picture and sound have been recorded properly for about 20 seconds prior to the edit start point**: [Playback unit] [Recording unit]
  This VCR first rewinds the tape to the section prior to the edit start point and then commences editing. For this reason, accurate editing cannot be performed if the tape has been left blank or if the picture and sound have not been recorded properly for 20 seconds prior to the edit start point.
- **Tape on which the Time code has been recorded continuously**: [Playback unit] [Recording unit]
  If the recording is broken up or if the tape is blank in places, the Time code will lack continuity, and editing will be aborted.
- **Tape which was recorded in SP mode**: [Recording unit]
  (This applies to Insert, Audio Dubbing and Audio Mixing only.)
  The above types of editing operations cannot be performed on a tape which was recorded in the LP mode.
- **Tape which was recorded in the 12bit audio mode**: [Recording unit]
  (This applies to AV Insert, Audio Dubbing and Audio Mixing editing only.)
  The above types of editing operations cannot be performed on a tape which was recorded in the 16bit audio mode.

When a tape which was recorded on another video recorder is used for Insert, Audio Dubbing or Audio Mixing editing operations, the sound may deteriorate and the picture may be disturbed.

If tapes answering to the above description are not available, proceed with dubbing by following the steps below to create the tapes for editing.

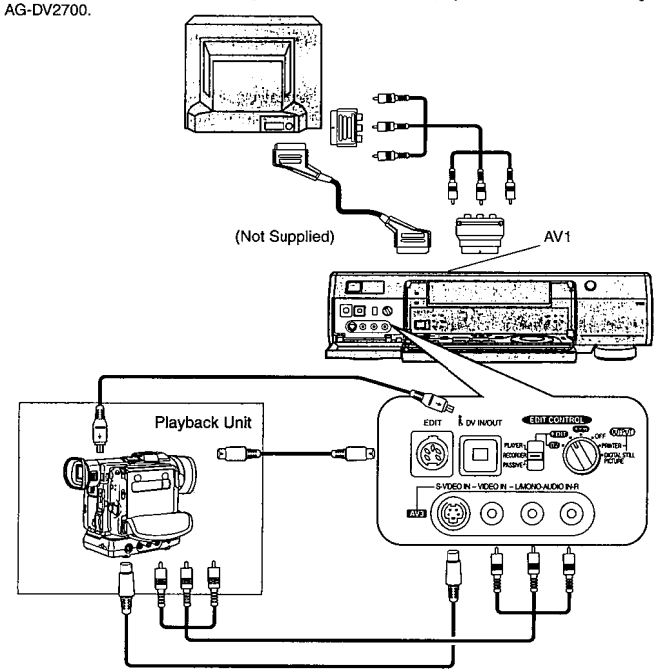
1 Load the original cassette tape into the playback unit and the new cassette tape into the recording VCR (the AG-DV2700).
2 Connect the playback unit and recording VCR (the AG-DV2700).
  For the connection, use the DV cable when the contents of the original cassette are to be copied using their original digital signals, and use the AV cable when the contents are to be copied using the signals from the video and audio sockets.
  (To dub a 16bit audio tape and make a 12bit audio tape, connect the units using the AV cables, and proceed with the dubbing.)
3 Check that **EDIT CONTROL** is at the **OFF** position.
4 Set the VCR's tape speed to **SP.**
5 Record a blank picture for about 20 seconds.
  Set the playback unit to the stop mode, set **INPUT SELECT** on the recording VCR (the AG-DV2700) to A2 or A3, and start recording.
6 Switch over the input of the recording VCR (the AG-DV2700).
  If the DV cable was used for the connection in step **2**, switch over to "DV IN"; if the AV cable was used, switch over to A1, A2 or A3.
7 Press the play button on the playback unit to start playing the original tape.
8 Press **REC (REC/OTR)** on the recording VCR (the AG-DV2700) to start dubbing.

Notes:

- Digital copying using a DV cable yields a picture quality which undergoes hardly any deterioration at all.
- If a digital video tape is dubbed without connecting the DV cable, the original sub code data (Photoshot index signals, date information, etc.) will not be copied.
- The Time code is simultaneously recorded over the sub code of the tape when the tape is recorded. Also recorded in the sub code are the photoshot index signals, information on the recording date, etc.
  For further details on the Time code, see page 92.

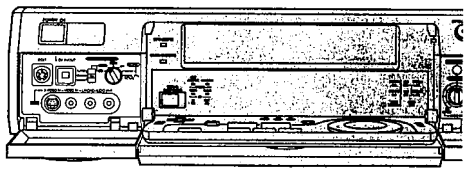
Connecting with a Digital Video Camera

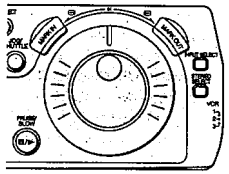
Example for connecting Panasonic AG-EZ30 Digital Video Camera as the playback unit, when controlling the playback unit through the AG-DV2700.



Notes:

- Before connecting any cables, first make sure that the power for both units is off.
- Insert a recorded cassette into the playback unit, and a cassette with the closed record prevention tab into the VCR.
- If the playback unit is connected to the recording unit via an S-VIDEO cable, the video signal on the S-VIDEO cable takes priority. If the playback unit does not have an S-VIDEO socket do not connect the S-VIDEO cable to the AG-DV2700.
- If units are connected to the VIDEO input sockets on both the front and rear of this VCR, the rear video inputs are automatically switched off.
- Use of an AC adaptor as the power source for the Digital Video Camera is recommended. Doing so avoids a situation where the camera shuts down due to low battery power.
- It is recommended that the DV cable be disconnected for editing with **INPUT SELECT** set to A1-A3. If **INPUT SELECT** is set to A1-A3 with the connections shown in the figure left unchanged, the TV picture may be disturbed or noise may occur. (This has no effect on the actual editing operations.)
- When the units are connected using the DV cable and editing is performed, some editing functions will differ compared with when the units are connected using the AV cable. Refer to Glossary of Terms on page 92.
- When performing editing by connecting the units via a 21-pin scart cable, set the **AV2** setting to **EXT.** See page 45.
- Read the operating instructions of the Digital Video Camera.
- Do not change the **EDIT CONTROL** or **EDIT MODE** settings while performing setting or editing operations at the SET UP or EDIT MENU screens. Be sure to quit these screens before changing these settings.
- When using a Panasonic Digital Video Camera as the playback unit, the following editing functions can be used by connecting the camera to the AG-DV2700 with just a DV cable:
  Copying
  Video Insert
  Audio Insert
  Assemble
  In this case, simply set **INPUT SELECT** to DV IN, and set **EDIT CONTROL** to **DV.**
  (This function may not operate properly with some models.)
- Use Time codes for Programme Editing when the playback unit is connected to the AG-DV2700 via only a DV cable.





Playback Unit (Digital Video Camera)

1 Turn the power on.

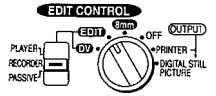
2 Make the Time code appear on the LCD monitor or the viewfinder.

3 Prepare the tape for playback.

Recording Unit (the AG-DV2700)

1 Turn the power on.

2 Set **EDIT MODE** to **RECORDER.**



3 Set **EDIT CONTROL** to **EDIT.**

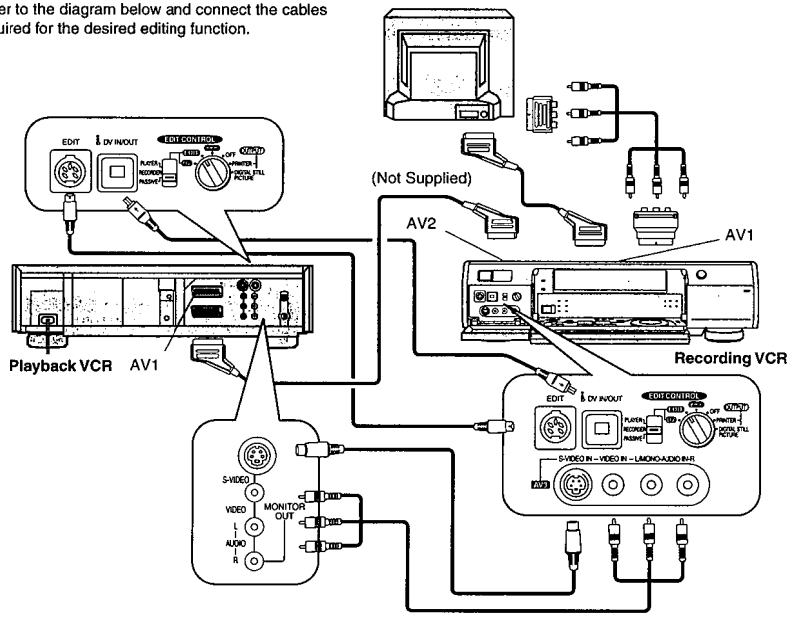
4 Press **INPUT SELECT** on the editing controller so that DV IN is selected.

- When performing Audio Dubbing or AV Insert, select A2 or A3.

Connecting Two Digital Video Cassette Recorders (Both This Model)

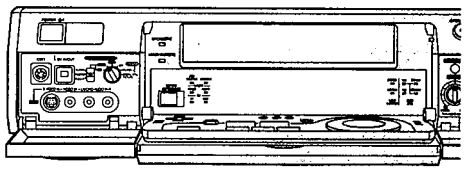
Example for connecting two AG-DV2700s, when controlling the playback VCR through the recording VCR.

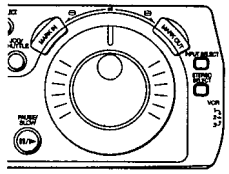
Refer to the diagram below and connect the cables required for the desired editing function.



Notes:

- Before connecting any cables, first make sure that the power for both VCRs is off.
- Insert a recorded cassette into the playback VCR, and a cassette with the closed record prevention tab into the VCR.
- When the units are connected using the DV cable and editing is performed, some editing functions will differ compared with when the units are connected using the AV cable. Refer to Glossary of Terms on page 92.
- Use Time codes for programme editing when the playback VCR is connected to the AG-DV2700 via only a DV cable.
- When performing editing by connecting the units via a 21-pin scart cable, set the **AV2** setting to **EXT.** See page 45.
- It is recommended that the DV cable be disconnected for editing with **INPUT SELECT** set to A1-A3. If **INPUT SELECT** is set to A1-A3 with the connections shown in the figure left unchanged, the TV picture may be disturbed or noise may occur. (This has no effect on the actual editing operations.)
- If one of either the 21-pin scart cable or the AV cable is connected, it is not necessary to connect the other. If both cables are connected, electronic noise may be generated when the playback VCR and the recording VCR are in stop mode. Although this noise will not have any effect on the actual editing operations, if it does become annoying, set the **INPUT SELECT** on the playback VCR to a position for which no cable is connected.
- When the connections and setting are made as shown above, then :
  - The Timer recording On Screen Display cannot be displayed on the playback VCR.
  - The ▷**(PLAY)**, ▶▶**(FAST FORWARD)**, **REC (REC/OTR)**, and the other such buttons on the playback VCR or the remote controller cannot be used to control the playback VCR directly. In order to permit direct control, set **EDIT CONTROL** on the playback VCR to **OFF.**
- Do not change the **EDIT CONTROL** or **EDIT MODE** settings while performing setting or editing operations at the SET UP or EDIT MENU screens. Be sure to quit these screens before changing these settings.
- The following editing functions can be used by connecting the playback VCR with just a DV cable:
  Copying
  Video Insert
  Audio Insert
  Assemble
  In this case, simply set **INPUT SELECT** to DV IN, and set **EDIT CONTROL** to **DV.**

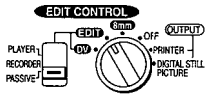




Playback VCR

1 Turn the power on.

2 Set **EDIT MODE** to **PASSIVE.**

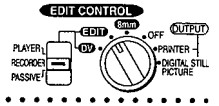


3 Set **EDIT CONTROL** to **EDIT.**

Recording VCR

1 Turn the power on.

2 Set the **EDIT MODE** to **RECORDER.**



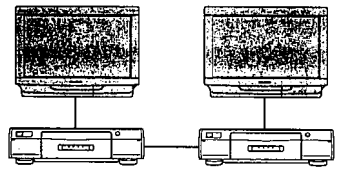
3 Set **EDIT CONTROL** to **EDIT.**

4 Press **INPUT SELECT** on the editing controller so that DV IN is selected.
- When performing Audio Dubbing or AV Insert, select A2 or A3.

Controlling the Recording VCR through the Playback VCR

Follow the procedure described below:

- Connect the edit cable to the **EDIT** socket on both the playback VCR and the recording VCR.
- Use 21pin-scart cable or AV cables to connect the input sockets on the recording VCR with the output sockets on the playback VCR.
- Connect two TVs, one to each of the VCRs, so that the screens from both VCRs can both be seen.
- Set **EDIT CONTROL** on both the playback VCR and the recording VCR to **EDIT.**
- Press **INPUT SELECT** on the playback VCR and select a position to which a cable is not connected.
- Set **EDIT MODE** on both VCRs as follows:
  Playback VCR : **PLAYER**
  Recording VCR : **PASSIVE**



Recording VCR Playback VCR

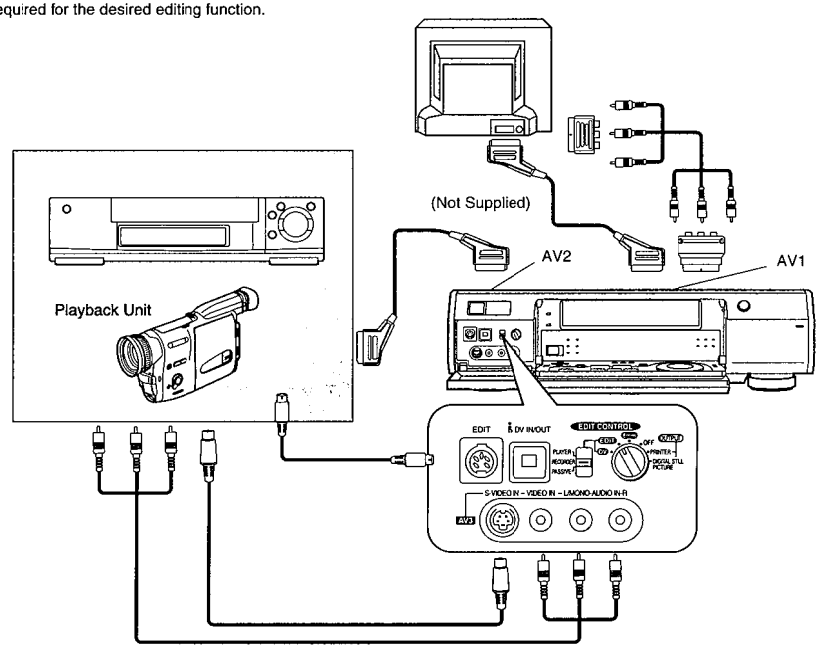
Notes:

- When this connection is made, the recording VCR cannot be controlled using the DV cable.
- Although noise may appear on the screen, depending on the connections, the noise has no effect on the actual editing operations.
- Audio Insert and AV Insert are not possible in this configuration.
- When performing editing with this connection, the editing accuracy may be worse than when controlled from the recording VCR.

Connecting an S-VHS (VHS) Video Equipment with an Edit Socket

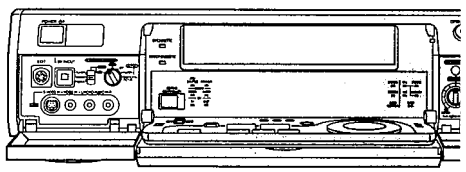
Example for connecting an S-VHS (VHS) video equipment with an Edit socket as the playback unit, when controlling the playback unit through the recording VCR (this unit).

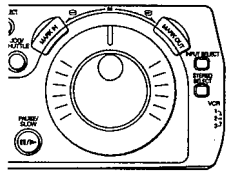
Refer to the diagram below and connect the cables required for the desired editing function.



Notes:

- Before connecting any cables, first make sure that the power for both units is off.
- Insert a recorded cassette into the playback unit, and a cassette with the closed record prevention tab into the VCR.
- If the playback unit is connected to the recording unit via an S-VIDEO cable, the video signal on the S-VIDEO cable takes priority. If the playback unit does not have an S-VIDEO socket do not connect the S-VIDEO cable to the AG-DV2700.
- If units are connected to the VIDEO input sockets on both the front and rear of this VCR, the rear video inputs are automatically switched off.
- When performing editing by connecting the units via a 21-pin scart cable, set the **AV2** setting to **EXT.**
  See page 45.
- If one of either the 21-pin scart cable or the AV cable is connected, it is not necessary to connect the other. If both cables are connected, electronic noise may be generated when the playback VCR and the recording VCR are in stop mode. Although this noise will not have any effect on the actual editing operations, if it does become annoying, set the **INPUT SELECT** on the playback VCR to a position for which no cable is connected.
- Read the operating instructions of the playback unit.
- Do not change the **EDIT CONTROL** or **EDIT MODE** settings while performing setting or editing operations at the SET UP or EDIT MENU screens. Be sure to quit these screens before changing these settings.
- When using this VCR as the recording VCR and performing editing by connecting the units via the AV cable or a 21-pin Scart cable, the On Screen Display (date/time, Time Code) may scroll vertically when still playback or slow playback are performed by the playback VCR.





Playback Unit (S-VHS (VHS) Video Equipment with an Edit socket)

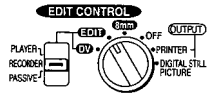
1 Turn the power on.

2 Set the unit so that it is ready to be controlled.
- Read the operating instructions of the playback unit and make the necessary settings.

Recording VCR (the AG-DV2700)

1 Turn the power on.

2 Set **EDIT MODE** to **RECORDER.**



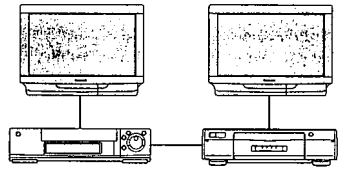
3 Set **EDIT CONTROL** to **EDIT.**

4 Press **INPUT SELECT** on the editing controller so that A3 is selected.
- If the playback unit is connected to the external input on the rear of the AG-DV2700, select A2.

Connecting the AG-DV2700 as the Playback VCR to an S-VHS (VHS) VCR

Follow the procedure described below.

- Connect the edit cable to the **EDIT** socket on both the playback VCR and the recording VCR.
- Use 21pin-scart cable or AV cables to connect the output sockets on the AG-DV2700 with the input sockets on the S-VHS (VHS) VCR.
- Connect two TVs, one to the AG-DV2700 and one to the S-VHS (VHS) VCR, so that the screens from both VCRs can both be seen.
- Set **EDIT CONTROL** on the AG-DV2700 to **EDIT.**
- Set **EDIT MODE** on the AG-DV2700 to **PLAYER.**
- Press **INPUT SELECT** on the playback VCR and select a position to which a cable is not connected.
- Make the necessary editing control settings for the S-VHS (VHS) VCR. (Read the operating instructions of S-VHS (VHS) VCR.)

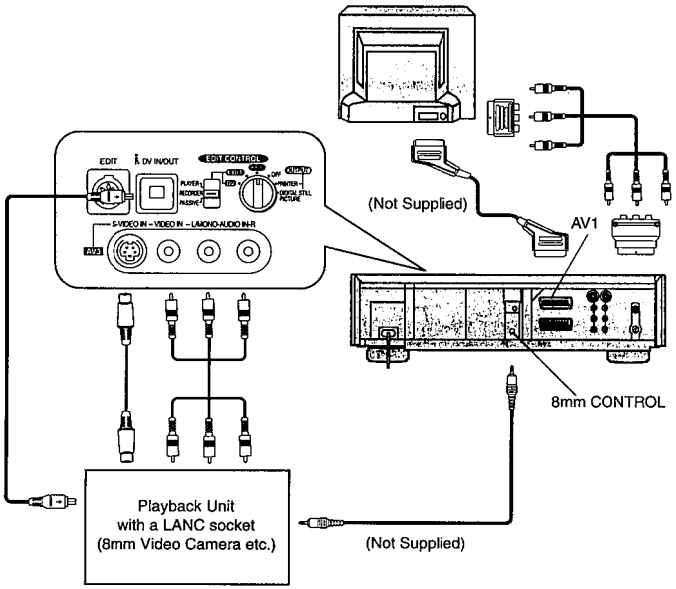


The Recording Unit — The Playback Unit (AG-DV2700)

Note:
Audio Insert and AV Insert are not possible in this configuration.

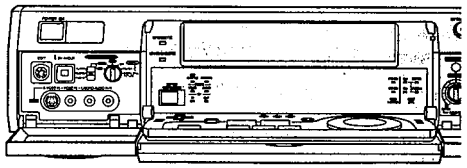
Connecting a Video Equipment with a LANC Socket

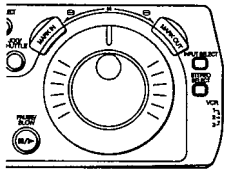
Example for connecting another manufacturer's video equipment with a LANC terminal (L control) as the playback unit, when controlling the playback unit through the VCR.



Notes:

- Before connecting any cables, first make sure that the power for both units is off.
- Insert a recorded cassette into the playback unit, and a cassette with the closed record prevention tab into the VCR.
- The AG-DV2700 cannot be controlled through video equipment with a LANC socket.
- Some types of LANC sockets have a different shape to the LANC socket on the AG-DV2700.
- If an attempt is made to perform an operation through the AG-DV2700 that the playback unit does not support, the unit may operate incorrectly.
- If the playback unit is connected to the recording unit via an S-VIDEO cable, the video signal on the S-VIDEO cable takes priority. If the playback unit does not have an S-VIDEO socket do not connect the S-VIDEO cable to the AG-DV2700.
- If units are connected to the VIDEO input sockets on both the front and rear of this VCR, the rear video inputs are automatically switched off.
- When the units are connected using the DV cable and editing is performed, some editing functions will differ compared with when the units are connected using the AV cable. Refer to Glossary of Terms on page 92.
- Read the operating instructions of the playback unit.
- Do not change the **EDIT CONTROL** or **EDIT MODE** settings while performing setting or editing operations at the SET UP or EDIT MENU screens. Be sure to quit these screens before changing these settings.
- When using this VCR as the recording VCR and performing editing by connecting the units via the AV cable or a 21-pin Scart cable, the On Screen Display (date/time, Time Code) may scroll vertically when still playback or slow playback are performed by the playback VCR.





Playback Unit (a Video Equipment with a LANC socket)

1 Turn the power on.

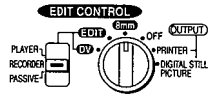
2 Set the unit so that it is ready to be controlled.

- Read the operating instructions of the playback unit and make the necessary settings.

Recording VCR (the AG-DV2700)

1 Turn the power on.

2 Set the **EDIT CONTROL** to **8mm.**

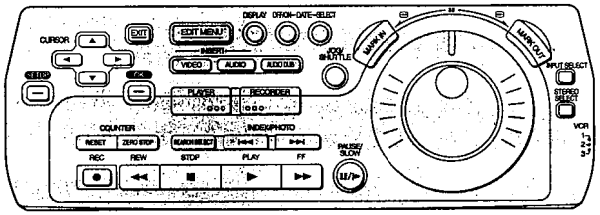


3 Press **INPUT SELECT** on the editing controller so that A3 is selected.

- If the playback unit is connected to the external input on the rear of the AG-DV2700, select A2.
- When the playback unit is connected via a DV cable, select DV IN.
- When performing Audio Dubbing or AV Insert, select A2 or A3.

Initial Settings for Editing

This VCR also allows some settings for editing to be made at the On Screen Display (OSD).



Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings. See pages 50-57.

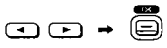
Search with Sound

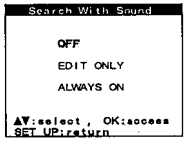
1 Press **SET UP.**

2 Select **Search With Sound** and press **OK.**

On Screen Display

3 Select **OFF, EDIT ONLY** or **ALWAYS ON,** and then press **OK.**





OFF: The sound cannot be heard during special playback.
EDIT ONLY: The sound can be heard during special playback only when an editing operation is in progress.
ALWAYS ON: The sound can be always heard during special playback.

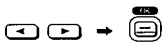
4 Press **EXIT** to exit the On Screen Display.

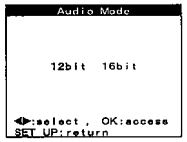
Audio Mode

1 Press **SET UP.**

2 Select **Audio Mode** and press **OK.**

3 Select **12bit** or **16bit,** and then press **OK.**





12bit: Divides the audio area into two stereo audio tracks, STEREO1 and STEREO2.
- If a recording is made in 12bit audio mode, the sound is recorded on STEREO1 only, and is not recorded on STEREO2. STEREO2 is used to record new audio that is added through Audio Dubbing or Audio Mixing.

16bit: Uses the entire audio area in order to record audio with greater quality.

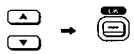
4 Press **EXIT** to exit the On Screen Display.

One-Touch-Edit

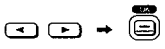
1 Press **SET UP.**

2 Select **One-Touch-Edit** and press **OK.**

On Screen Display



3 Select **OFF** or **ON,** and then press **OK.**



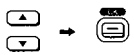
OFF: Select this whenever you are performing any editing function other than One-Touch-Edit.
ON: Select this in order to perform One-Touch-Edit.
- One-Touch-Edit is possible only when **EDIT CONTROL** is set to either **DV, EDIT,** or **8mm,** and **EDIT MODE** is set to **RECORDER.**

4 Press **EXIT** to exit the On Screen Display.

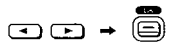
AV-IN Colour Level

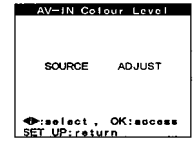
1 Press **SET UP.**

2 Select **AV-IN Colour Level,** and press **OK.**



3 Select **SOURCE** or **ADJUST,** and then press **OK.**

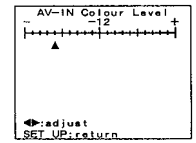




SOURCE: Normally set this position.
ADJUST: To adjust the colour level of the input external recording source.

If you select **ADJUST** and then press **OK,** the AV-IN Colour Level screen is displayed.

4 Adjust the colour level using ◀▶.



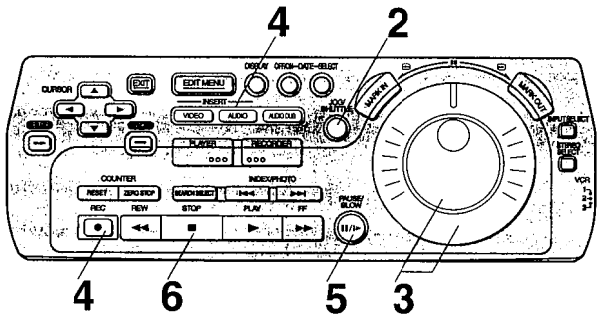
Press ◀ to make the colour lighter
Press ▶ to make the colour darker
The setting can be adjusted over a range of ±20.

5 Press **SET UP,** and then press **EXIT** to exit the On Screen Display.

Notes:
- If **INPUT SELECT** is set to DV IN, the Audio Mode menu, and the AV-IN Colour Level menu cannot be selected.
- The SET UP or EDIT MENU screen is displayed in English, regardless of the language that is set for the On Screen Display.
- The AV-IN Colour Level menu can be selected in following cases:
  INPUT SELECT is set to A1, A2 or A3;
  When the VCR is in stop mode

Editing when Not Using an Edit Cable

To connect a VCR or Movie Camera without an Edit Socket and use the AG-DV2700 as the Recording VCR.



Preparations

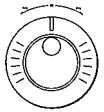
- Complete necessary connections and settings. See pages 50-59.
- Connect the AV1 socket on the AG-DV2700 to the TV.
- Connect the AV2 socket or the AUDIO/VIDEO/S-VIDEO IN (AV3) sockets on the AG-DV2700 to the playback unit. Set **INPUT SELECT** on this VCR as follows:
  - A2: Through the AV2 socket
  - A3: Through the AV3 sockets on the front panel or rear panel.
- If the playback unit has a DV terminal, connect to the DV IN/OUT on the AG-DV2700 with a DV cable.

Operations

1 Using the controls on the playback unit, search for the edit start point, and then pause the playback.

2 Press **JOG/SHUTTLE** on the AG-DV2700, and check that the button is lit.

3 Search for the edit start point.



4 Press the button for the editing mode on the AG-DV2700.

To copy the contents of the tape in the playback unit as is: Press **REC.**
To insert picture: Press **VIDEO INSERT.**
To insert sound: Press **AUDIO INSERT.**
To insert picture and sound: Press **VIDEO INSERT** and then press **AUDIO INSERT** (or vice versa).
To add new sound: Press **AUDIO DUB.**
For Audio Mixing: Press **AUDIO DUB** and then press **MIXING EDIT** on the front right panel.

- The Audio Mixing procedure differs in part from other editing operations. See page 66.
- The indicator that corresponds to the selected editing mode lights on the VCR display.

5 Press **PAUSE/SLOW** on the AG-DV2700 and start playback on the playback unit simultaneously.

- Editing begins.

6 Press ■ **(STOP)** on the AG-DV2700, and then press STOP on playback unit to stop editing.

Notes:

- Although Copying can be performed in LP mode, Insert and Audio Dubbing cannot be performed with a tape recorded in LP mode. It is necessary to first copy the tape in SP mode.
- **Video Insert and Audio Insert are not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle.
- **AV Insert , Audio Dubbing and Audio Mixing are not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in 16bit audio mode;
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle.
  When **INPUT SELECT** is set to DV IN.
- If the time display on the AG-DV2700 is set to tape counter mode during editing, the AG-DV2700 stops the editing operation automatically when the counter reaches "0:00.00".
  (This function does not work when using the Copying or Audio Dubbing functions.)

Indicators On the VCR Display

VIDEO INSERT

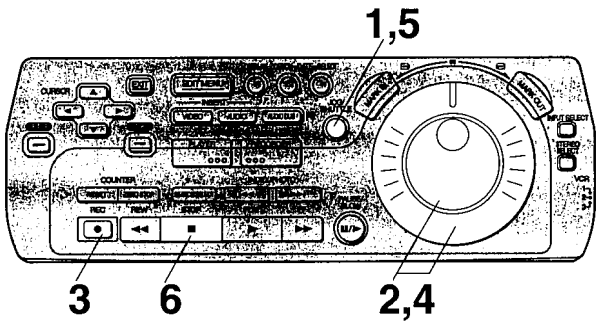
AUDIO INSERT

AV INSERT

AUDIO DUBBING
AUDIO MIXING

One-Touch Assemble

If the One-Touch Edit function is used, Assemble editing can be performed by controlling the playback unit through the AG-DV2700.



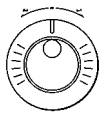
Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings. See pages 50-59.
- Set to **One-Touch-Edit ON** on SET UP menu.

Operations

1 Press **JOG/SHUTTLE** on the AG-DV2700, and check that the button is lit.

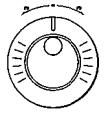
2 Search for the edit start point on the AG-DV2700.



3 Press **REC.**

- The picture from the playback unit appears on the screen.

4 Search for the edit start point on the playback unit using Jog dial and Shuttle Ring on the AG-DV2700.



5 Press **JOG/SHUTTLE** on the AG-DV2700.

- Editing begins.
- To continue editing, press **JOG/SHUTTLE** on the AG-DV2700, and repeat steps **4-5.**

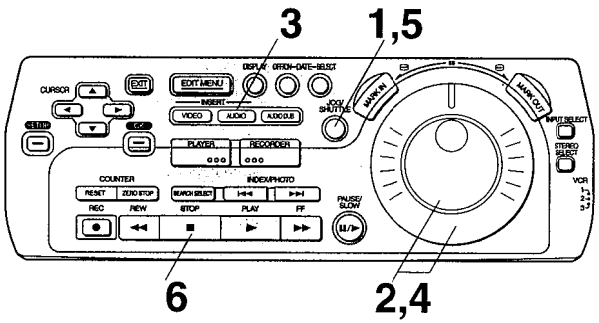
6 Press ■ **(STOP)** on the AG-DV2700, to stop editing.

Notes:

- Although Assemble editing can be performed in LP mode, Insert, Audio Dubbing, and Audio Mixing cannot be performed with a tape recorded in LP mode. It is necessary to first copy the tape in SP mode.
- In order to ensure that the editing operation is performed properly, the editing points should be set at least 20 seconds after the beginning of the tape.
- When using the editing controller for remote control:
  In order to conserve battery power, **JOG/SHUTTLE** turns off after one minute.
  If **JOG/SHUTTLE** turns off after the edit start point has been set on the recording unit (step **2**), it is necessary to press **JOG/SHUTTLE** again (so that it is lit) before searching for the edit start point on the playback unit.
  If **JOG/SHUTTLE** turns off after the edit start point has been determined on the playback unit (step **4**), it is necessary to press **JOG/SHUTTLE** twice in order to start editing.

One-Touch Insert /Audio Dubbing

If the One-Touch Edit function is used, Insert (Video Insert, Audio Insert, and AV Insert) and Audio Dubbing can be performed by controlling the playback unit through the AG-DV2700.



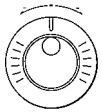
Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings. See pages 50-59.
- Set to **One-Touch-Edit ON** on SET UP menu.

Operations

1 Press **JOG/SHUTTLE** on the AG-DV2700, and check that the button is lit.

2 Search for the edit start point on the AG-DV2700.



3 Press the button for the editing mode on the AG-DV2700.

To insert picture: Press **VIDEO INSERT.**
To insert sound: Press **AUDIO INSERT.**
To insert picture and sound: Press **VIDEO INSERT** and then press **AUDIO INSERT** (or vice versa).
To add new sound: Press **AUDIO DUB.**

- The indicator that corresponds to the selected editing mode lights on the VCR display.
- The picture from the playback unit appears on the screen.

Indicators On the VCR Display

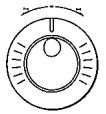

VIDEO INSERT


AUDIO INSERT


AV INSERT


AUDIO DUBBING

4 Search for the edit start point on the playback unit using Jog dial and Shuttle Ring on the AG-DV2700.



5 Press **JOG/SHUTTLE** on the AG-DV2700.

- Editing begins.
- To continue editing, press **JOG/SHUTTLE** on the AG-DV2700, and repeat steps **4-5.**

6 Press ■ **(STOP)** on the AG-DV2700, to stop editing.

To monitor the edited audio after Audio Dubbing

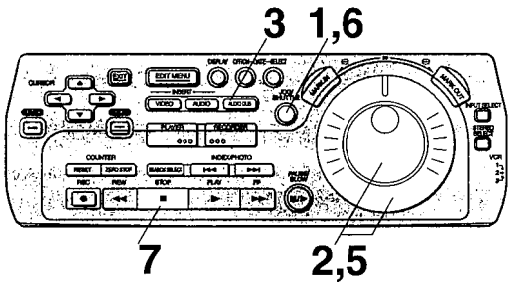
Press **STEREO SELECT** during playback and select STEREO2.

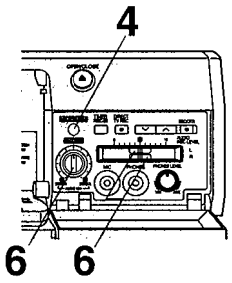
Notes:

- **Video Insert and Audio Insert are not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle.
- **AV Insert and Audio Dubbing are not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in 16bit audio mode;
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle.
  When **INPUT SELECT** is set to DV IN.
- If the time display on the AG-DV2700 is set to tape counter mode during editing, the AG-DV2700 stops the editing operation automatically when the counter reaches "0:00.00".
- In order to ensure that the editing operation is performed properly, the editing points should be set at least 20 seconds after the beginning of the tape.
- When using the editing controller for remote control:
  In order to conserve battery power, **JOG/SHUTTLE** turns off after one minute.
  If **JOG/SHUTTLE** turns off after the edit start point has been set on the recording unit (step **2**), it is necessary to press **JOG/SHUTTLE** again (so that it is lit) before searching for the edit start point on the playback unit.
  If **JOG/SHUTTLE** turns off after the edit start point has been determined on the playback unit (step **4**), it is necessary to press **JOG/SHUTTLE** twice in order to start editing.

One-Touch Audio Mixing

This function is used to mix the audio on STEREO1, which has already been recorded, with audio from a external recording source (A2 or A3), and record the result on STEREO2.
This function is useful for adding new audio, such as music or a narration, to the original audio which has already been recorded.





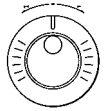
Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings. See pages 50-59.
- Set to **One-Touch-Edit ON** on SET UP menu.

Operations

1 Press **JOG/SHUTTLE** on the AG-DV2700, and check that the button is lit.

2 Search for the edit start point on the AG-DV2700.



3 Press **AUDIO DUB** on the AG-DV2700.

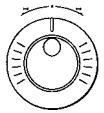
- The picture from the playback unit appears on the screen.

Notes:

- **Audio Mixing is not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in 16bit audio mode;
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle.
  When **INPUT SELECT** is set to DV IN.
- In order to ensure that the editing operation is performed properly, the editing points should be set at least 20 seconds after the beginning of the tape.

4 Press **MIXING EDIT** on the AG-DV2700.

5 Search for the edit start point on the playback unit using Jog dial and Shuttle Ring on the AG-DV2700.



6 Press **JOG/SHUTTLE** on the AG-DV2700.

- Editing begins.
- If you wish to adjust the volume of the original audio (STEREO1) and external recording source (A2 or A3) during Audio Mixing,
  AUDIO MIX: To adjust the volume of the original audio (STEREO1).
  AUDIO REC LEVEL: To adjust the volume of the audio from external recording source (A2 or A3).
- To continue editing, press **JOG/SHUTTLE** on the AG-DV2700, and repeat steps **5-6.**

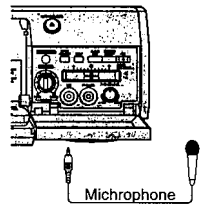
7 Press ■ **(STOP)** on the AG-DV2700, to stop editing.

To monitor the mixed signal after Audio Mixing

Press **STEREO SELECT** during playback and select STEREO2.

When editing with a microphone

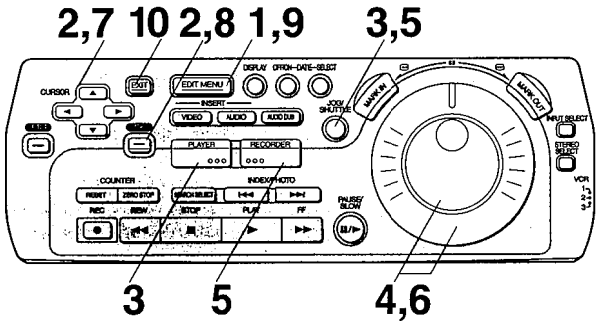
1. Connect the microphone to the MIC socket.
2. Press **JOG/SHUTTLE.**
3. Use Jog Dial and Shuttle Ring to search the recording start point.
4. Press **AUDIO DUB.**
5. Press **MIXING EDIT.**
6. Use **AUDIO REC LEVEL** slider to adjust the microphone level.
7. Press **PAUSE/SLOW.**
8. Press ■ **(STOP)** to stop editing.



- The audio from the microphone is recorded as monaural audio. Use audio cables to connect audio equipment, etc., in order to record in stereo.
- If both the MIC socket and the line inputs are connected, the audio from the MIC socket is given priority in recording.

Manual Copying

This function can be used to copy tapes between digital video equipments with practically no deterioration in quality.
This function can also copy a tape that was recorded in S-VHS (VHS) format onto a digital video tape.



Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings. See pages 50-59.

Operations

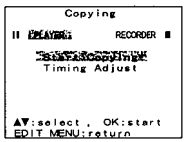
1 Press **EDIT MENU.**

2 Check that **Copying** is selected and press **OK.**

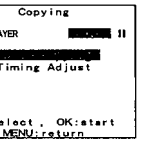
3 Press **PLAYER,** and then press **JOG/SHUTTLE.**
- The picture from the playback unit appears on the screen.

4 Search for the edit start point on the playback unit.

On Screen Display



5 Press **RECORDER,** and then press **JOG/SHUTTLE.**
- The picture from the recording VCR appears on the screen.



6 Search for the edit start point on the recording VCR.

7 Select **Start Copying.**

8 Press **OK.**
- Editing begins.

9 Press **EDIT MENU** to stop editing.

- Operation now returns to the screen which appears in step **3.** This makes it possible to continue with editing or change the point at which editing is to start.

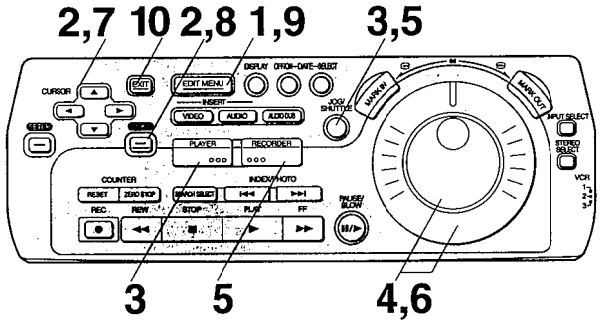
10 Press **EXIT.**

- The On Screen Display disappears.

Notes:
- If a digital video tape is copied without connecting a DV cable, the original sub code data (photoshot index signals, recording date, etc.) is not copied.
- Although Copying can be performed in LP mode, Insert and Audio Dubbing cannot be performed with a tape recorded in LP mode. It is necessary to first copy the tape in SP mode.
- In order to ensure that the editing operation is performed properly, the editing points should be set at least 20 seconds after the beginning of the tape.
- The pause operation may be indicated on the display of the playback unit even though the playback unit is actually playing the tape in slow motion.
- Up to ±1 second of slight deviation in the specified edit start position can be corrected. See page 90 for Edit Timing Adjustment.

Manual Insert

This function is used to replace the picture and sound on a recorded tape.



Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings. See pages 50-59.

Example: Video Insert

Operations

1 Press **EDIT MENU.**

2 Select **Video Insert**, and then Press **OK.**
To insert picture: Select **Video Insert.**
To insert sound: Select **Audio Insert.**
To insert picture and sound: Select **AV Insert.**

3 Press **PLAYER** and **JOG/SHUTTLE.**
- The picture from the playback unit appears on the screen.

4 Search for the edit start point on the playback unit.

On Screen Display

5 Press **RECORDER** and **JOG/SHUTTLE.**
- The picture from the recording VCR appears on the screen.

6 Search for the edit start point on the recording VCR.

7 Select **Start Insert.**

8 Press **OK.**
- Editing begins.

9 Press **EDIT MENU** to stop editing.

- Operation now returns to the screen which appears in step **3.** This makes it possible to continue with editing or change the point at which editing is to start.

10 Press **EXIT**

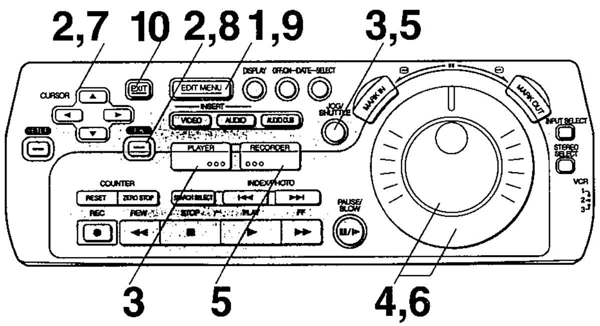
- The On Screen Display disappears.

Notes:

- **Video Insert and Audio Insert are not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle.
- **AV Insert is not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in 16bit audio mode;
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle.
  When **INPUT SELECT** is set to DV IN.
- In order to ensure that the editing operation is performed properly, the editing points should be set at least 20 seconds after the beginning of the tape.
- The pause operation may be indicated on the display of the playback unit even though the playback unit is actually playing the tape in slow motion.
- Up to ±1 second of slight deviation in the specified edit start position can be corrected. See page 90 for Edit Timing Adjustment.

Manual Audio Dubbing

This function is used to add new sound on the STEREO2 track of previously recorded tape.



Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings. See pages 50-59.

1—48

Operations

1 Press **EDIT MENU**.

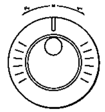
2 Select **Audio Dubbing**, and then Press **OK**.

On Screen Display

```
EDIT MENU
Copying
Video Insert
Audio Insert
AV Insert
Audio Dubbing
Programme Editing

▲▼:select , OK:access
EXIT:leave menu
```

3 Press **PLAYER** and **JOG/SHUTTLE**.
- The picture from the playback unit appears on the screen.

4 Search for the edit start point on the playback unit.

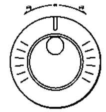


```
Audio Dubbing
II [illegible]          RECORDER ■
[illegible]
Timing Adjust

▲▼:select , OK:start
EDIT MENU:return
```

5 Press **RECORDER** and **JOG/SHUTTLE.**
- The picture from the recording VCR appears on the screen.

```
Audio Dubbing
II PLAYER          [illegible] II
[illegible]
Timing Adjust

▲▼:select , OK:start
EDIT MENU:return
```

6 Search for the edit start point on the recording VCR.



7 Select **Start Dubbing.**

8 Press **OK.**
- Editing begins.

```
Audio Dubbing
▶ PLAYER          RECORDER ●
Dubbing in Progress

EDIT MENU:stop
```

9 Press **EDIT MENU** to stop editing.
- Operation now returns to the screen which appears in step **3**. This makes it possible to continue with editing or change the point at which editing is to start.

10 Press **EXIT.**
- The On Screen Display disappears.

To monitor the mixed signal after Audio Mixing

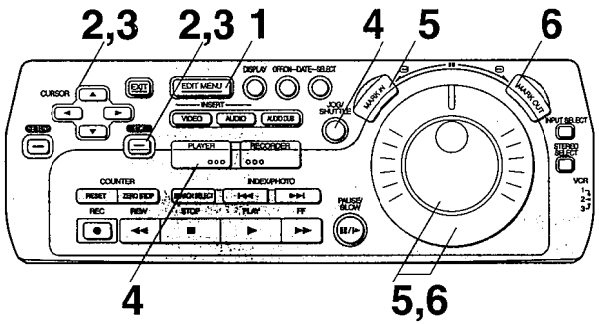
Press **STEREO SELECT** during playback and select STEREO2.

Notes:

- **Audio Dubbing is not possible in the following cases:** When the tape in the recording VCR (the AG-DV2700) is: Recorded in 16bit audio mode; Recorded in LP mode; Blank, or contains a blank portion in the middle. When **INPUT SELECT** is set to DV IN.
- In order to ensure that the editing operation is performed properly, the editing points should be set at least 20 seconds after the beginning of the tape.
- The pause operation may be indicated on the display of the playback unit even though the playback unit is actually playing the tape in slow motion.
- Up to ±1 second of slight deviation in the specified edit start position can be corrected. See page 90 for Edit Timing Adjustment.

Programme Assemble

This function can be used to link together desired scenes on a tape.
This function can also be used to skip unnecessary scenes recorded on a tape and copy them onto a separate tape.



Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings.
  See pages 50-59.

Operations

1 Press **EDIT MENU.**

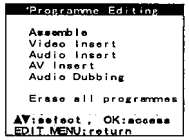
2 Select **Programme Editing**, and then Press **OK.**

On Screen Display

Notes:

- Programme Editing can be performed using either the tape counter or Time code display, but the Time code display should be used if the units are connected only by a DV cable.
- If you attempt to switch to the tape counter display in order to perform editing after setting the editing points using the Time code display, the Erase all programmes screen is displayed.
  (The Erase all programmes screen is also displayed when you change from the tape counter display to the Time code display.)
- After setting a programme, if you attempt to set another programme in a different editing operation, the set contents for the previous editing operation remain on the setting screen. In order to prevent editing errors, perform the Erase all programmes operation (page 87) whenever you set a programme under a different editing mode.
- Programme editing can not be performed with a movie camera that has a 4-digit counter.

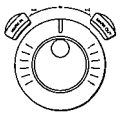
3 Select **Assemble**, and then Press **OK.**

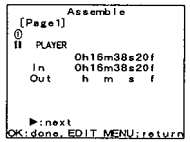


4 Press **PLAYER** and **JOG/SHUTTLE**

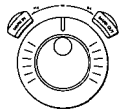
- The picture from the playback unit appears on the screen.

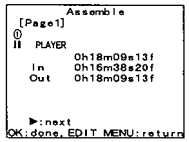
5 Search for the edit start point on the playback unit and press **MARK IN.**





6 Search for the edit end point on the playback unit and press **MARK OUT.**



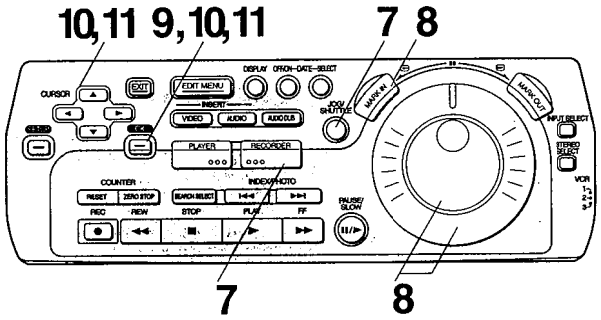


(Continued on next page)

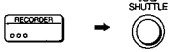
Notes:

- Although Assemble editing can be performed in LP mode, Insert, Audio Dubbing, and Audio Mixing cannot be performed with a tape recorded in LP mode. It is necessary to first copy the tape in SP mode.
- In order to ensure that the editing operation is performed properly, the editing points should be set at least 20 seconds after the beginning of the tape.
- The editing operation may not be performed correctly if the set duration of a programme is less than 4 seconds.
- On a video equipment whose Time code display or tape counter display does not show the frame value, the area where the frame value is displayed appears as "00f" or it remains blank.
  With some units, the frame value may be displayed when **MARK IN** or **MARK OUT** is pressed in steps **5** and **6** even if the unit concerned does not show the frame value.

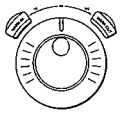
Programme Assemble (continued)



7 Press **RECORDER** and **JOG/SHUTTLE**
- The picture from the recording VCR appears on the screen.



8 Search for the edit start point on the recording VCR and press **MARK IN**.

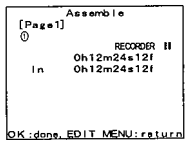


9 Press **OK**

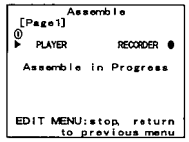
To check and change programmes:
Select **Confirm/Change** and then press **OK**.
- To confirm, change, insert or erase editing programmes, see pages 86-87.
- Programmes cannot be inserted or erased through the recording unit.

To continue setting programmes:
1 Press **EDIT MENU**.
2 Press **PLAYER**.
3 Using ◄ ►, select the programme number. The programme number changes each time these buttons are pressed. (Up to 40 programmes can be set. 10 programmes can be set on one page; if this number is exceeded, the display automatically changes to the next page.)
4 Repeat steps **4-6** and **9**.

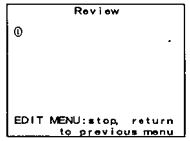
On Screen Display



10 Select **Start Assemble** to start editing, and then press **OK**.
- Editing begins after the playback unit and the recording VCR both rewind their tapes to the edit start points.



11 After completing editing, select **Review**, and then press **OK**.
- The edited pictures are played back.



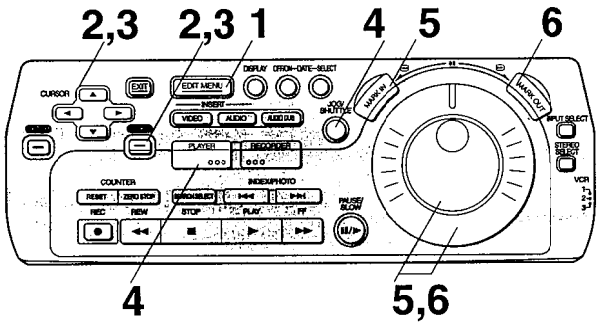
To interrupt editing or Review:
Press **EDIT MENU**.

Notes:
- The Preview function cannot be used with the Assemble function.
- Up to ±1 second of slight deviation in the specified edit start/end position can be corrected. See pages 88-89 for Edit Timing Adjustment.

1—50

Programme Insert

This function is used to replace the picture and sound on a recorded tape.



Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings.
  See pages 50-59.

Example: Video Insert

Operations

1 Press **EDIT MENU.**

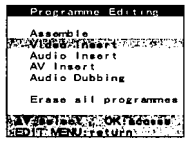
2 Select **Programme Editing**, and then Press **OK.**

On Screen Display

Notes:

- Programme Editing can be performed using either the tape counter or Time code display.
- If you attempt to switch to the tape counter display in order to perform editing after setting the editing points using the Time code display, the Erase all programmes screen is displayed.
  (The Erase all programmes screen is also displayed when you change from the tape counter display to the Time code display.)
- After seting a programme, if you attempt to set another programme in a different editing mode, the set contents for the previous editing mode remain on the setting screen. In order to prevent editing errors, perform the Erase all programmes operation (page 87) whenever you set a programme under a different editing mode.
- Programme Editing can not be performed with a movie camera that has a 4-digit counter.
- **Video Insert and Audio Insert are not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle.

3 Select the desired editing operation, and then press **OK.**
To insert picture: **Video Insert.**
To insert sound: **Audio Insert.**
To insert picture and sound: **AV Insert.**



4 Press **PLAYER** and **JOG/SHUTTLE**
- The picture from the playback unit appears on the screen.

5 Search for the edit start point on the playback unit and press **MARK IN.**

6 Search for the edit end point on the playback unit and press **MARK OUT.**

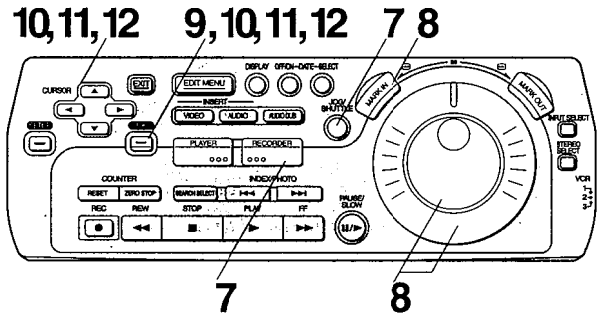
(Continued on next page)

- **AV Insert is not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in 16bit audio mode;
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle.
  When **INPUT SELECT** is set to DV IN.

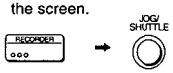
Notes on editing point setting

- The Programme Insert and Audio Dubbing functions require the setting of only three editing points: the in and out points on the playback unit and the in point on the recording unit, or the in point on the playback unit and the in and out points on the recording unit.
- If both in and out points are set on both the playback unit and the recording unit, and the times between the points do not match, editing stops at the first out point that is reached.
- In order to ensure that the editing operation is performed properly, the editing points should be set at least 20 seconds after the beginning of the tape.
- The editing operation may not be performed correctly if the set duration of a programme is less than 4 seconds.
- On a video equipment whose Time code display or tape counter display does not show the frame value, the area where the frame value is displayed appears as "00f" or it remains blank.
  With some units, the frame value may be displayed when **MARK IN** or **MARK OUT** is pressed in steps **5** and **6** even if the unit concerned does not show the frame value.

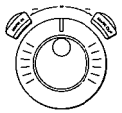
Programme Insert (continued)



7 Press **RECORDER** and **JOG/SHUTTLE**
- The picture from the recording VCR appears on the screen.



8 Search for the edit start point on the recording VCR and press **MARK IN**.

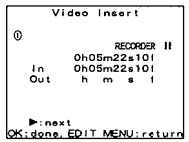


9 Press **OK**

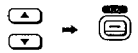
To check and change programmes:
Select **Confirm/Change** and then press **OK**.
- To confirm, change, insert or erase editing programmes, see pages 86-87.

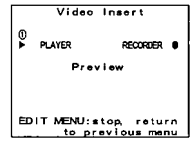
To continue setting programmes:
1 Press **EDIT MENU**.
2 Press **PLAYER**.
3 Using ◀ ▶, select the programme number.
The programme number changes each time these buttons are pressed.
Up to 10 programmes can be set.
4 Repeat steps **4-9**.

On Screen Display

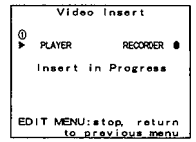


10 Select **Preview** to confirm the editing operation before performing actual editing, and then press **OK**.
- Preview begins after the playback unit and the recording VCR both rewind their tapes to the edit start points.

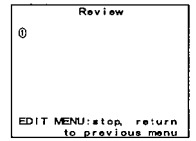




11 Select **Start Insert** to start editing, and then press **OK**.
- Editing begins after the playback unit and the recording VCR both rewind their tapes to the edit start points.



12 After completing editing, select **Review**, and then press **OK**.
- The edited pictures are played back.



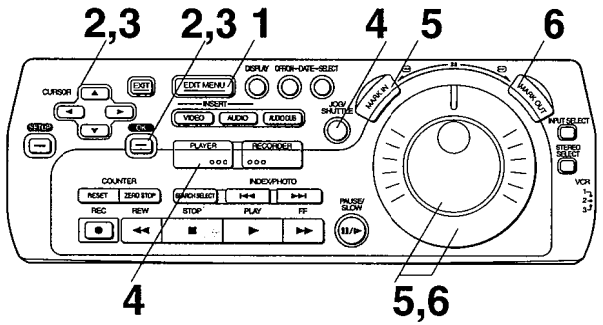
To interrupt editing, Preview or Review:
Press **EDIT MENU**.

Note:
Up to ±1 second of slight deviation in the specified edit start/end position can be corrected. See pages 88-89 for Edit Timing Adjustment.

1—52

Programme Audio Dubbing

This function is used to add new sound on the STEREO2 track of previously recorded tape.



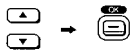
Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Complete necessary connections and settings. See pages 50-59.

Operations

1 Press **EDIT MENU.**

2 Select **Programme Editing**, and then Press **OK.**

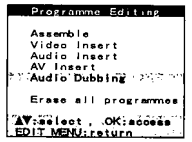


On Screen Display

Notes:

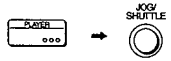
- Programme Editing can be performed using either the tape counter or Time code display.
- If you attempt to switch to the tape counter display in order to perform editing after setting the editing points using the Time code display, the Erase all programmes screen is displayed.
  (The Erase all programmes screen is also displayed when you change from the tape counter display to the Time code display.)
- Programme editing can not be performed with a movie camera that has a 4-digit counter.
- After setting a programme, if you attempt to set another programme in a different editing mode, the set contents for the previous editing mode remain on the setting screen. In order to prevent editing errors, perform the Erase all programmes operation (page 87) whenever you set a programme under a different editing mode.
- **Audio Dubbing is not possible in the following cases:**
  When the tape in the recording VCR (the AG-DV2700) is:
  Recorded in 16bit audio mode;
  Recorded in LP mode;
  Blank, or contains a blank portion in the middle
  When **INPUT SELECT** is set to DV IN.

3 Select **Audio Dubbing,** and then press **OK.**

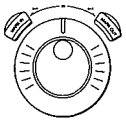


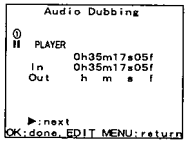
4 Press **PLAYER** and **JOG/SHUTTLE**

- The picture from the playback unit appears on the screen.

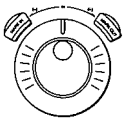


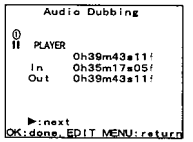
5 Search for the edit start point on the playback unit and press **MARK IN.**





6 Search for the edit end point on the playback unit and press **MARK OUT.**



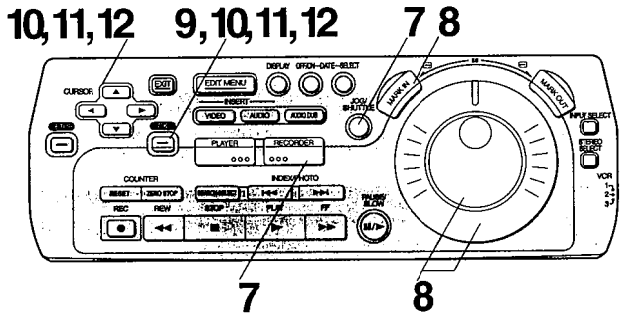


(Continued on next page)

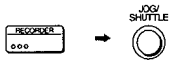
Notes on editing point setting

- The Programme Insert and Audio Dubbing functions require the setting of only three editing points: the in and out points on the playback unit and the in point on the recording unit, or the in point on the playback unit and the in and out points on the recording unit.
- If both in and out points are set on both the playback unit and the recording unit, and the times between the points do not match, editing stops at the first out point that is reached.
- In order to ensure that the editing operation is performed properly, the editing points should be set at least 20 seconds after the beginning of the tape.
- The editing operation may not be performed correctly if the set duration of a programme is less than 4 seconds.
- On a video equipment whose Time code display or tape counter display does not show the frame value, the area where the frame value is displayed appears as "00f" or it remains blank.
  With some units, the frame value may be displayed when **MARK IN** or **MARK OUT** is pressed in steps **5** and **6** even if the unit concerned does not show the frame value.

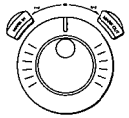
Programme Audio Dubbing (continued)



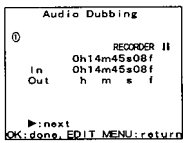
7 Press **RECORDER** and **JOG/SHUTTLE**
- The picture from the recording VCR appears on the screen.



8 Search for the edit start point on the recording VCR and press **MARK IN**.



On Screen Display

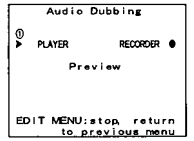


9 Press **OK**

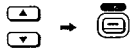
To check and change programmes:
Select **Confirm/Change** and then press **OK.**
- To confirm, change, insert or erase editing programmes, see pages 86-87.

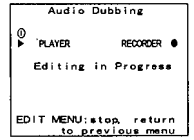
To continue setting programmes:
1 Press **EDIT MENU.**
2 Press **PLAYER.**
3 Using ◀ ▶, select the programme number.
The programme number changes each time these buttons are pressed.
Up to 10 programmes can be set.
4 Repeat steps **4-9.**

10 Select **Preview** to confirm the editing operation before performing actual editing, and then press **OK.**
- Preview begins after the playback unit and the recording VCR both rewind their tapes to the edit start points.

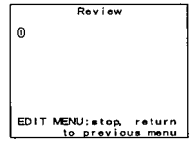


11 Select **Start Dubbing** to start editing, and then press **OK.**
- Editing begins after the playback unit and the recording VCR both rewind their tapes to the edit start points.





12 After completing editing, select **Review**, and then press **OK.**
- The edited sounds are played back.



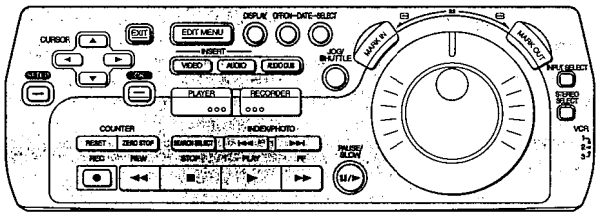
To interrupt editing, Preview or Review:
Press **EDIT MENU.**

To monitor the edited audio after Audio Dubbing
Press **STEREO SELECT** during playback and select STEREO2.

Note:
Up to ±1 second of slight deviation in the specified edit start/end position can be corrected. See pages 88-89 for Edit Timing Adjustment.

Other Editing Functions

These functions are used to confirm, change, etc. programmes.



Once all programme settings are completed, the screen shown at right is displayed.

Example: Video Insert

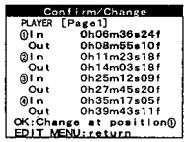
This portion varies, depending on the editing function that was programmed.

On Screen Display

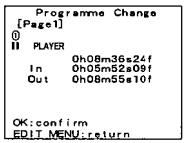
To check/change programmes:

1 Select **Confirm/Change**, and then press **OK.**
- The programme list for the playback unit is displayed.

To check the programme list for the recording unit, press **RECORDER.**
To just confirm the programme settings, press **EDIT MENU.**
If corrections are needed, continue with the procedure described below.



2 Select the programme number for which changes are to be made, and then press **OK.**
- The Programme Change screen for the selected programme number is displayed.



3 Press **JOG/SHUTTLE.**

4 Use the Jog Dial/Shuttle Ring to search for the editing point that is to be corrected.

5 To change an edit start point, press **MARK IN.**
To change an edit end point, press **MARK OUT.**

6 Once all changes are completed, press **OK.**

7 Press **EDIT MENU.**

To insert a new programme between existing programmes:

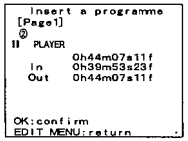
1 Select **Insert a programme**, and then press **OK.**
- The programme list is displayed.

2 Select the programme number where a programme is to be inserted, and then press **OK.**
- The Insert a programme screen is displayed.

3 Refer to the pages that describe the Programme Editing functions (on pages 74-85), and set the new programme.

4 When setting is complete, press **OK.**

5 Press **EDIT MENU.**

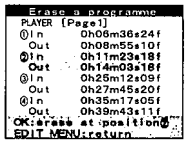


To cancel a programme:

1 Select **Erase a programme,** and then press **OK.**
- The programme list is displayed.

2 Select the programme number to be erased, and then press **OK.**

3 Press **EDIT MENU.**



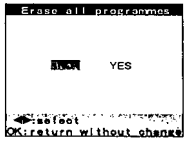
To cancel all editing programmes:

1 Press **EDIT MENU** twice.

2 Select **Programme Editing,** and then press **OK.**

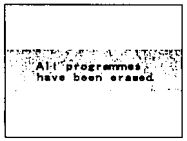
3 Check that **Erase all programmes** is selected and press **OK.**
- The Erase all programmes screen is displayed.

4 Select **YES,** and then press **OK.**
- The screen returns to the Programme Editing menu.
- After the message indicating that **"All programmes have been erased."** appears on the screen, operation returns to the EDIT MENU screen.



5 Press **EDIT MENU.**

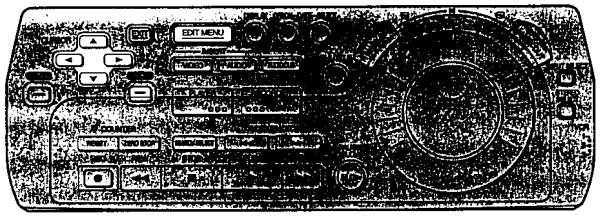
If the EDIT MENU screen is cancelled before the above procedure is performed, the method for displaying the Programme Editing changes.
Press **EDIT MENU** so that the EDIT MENU screen is displayed. Use to select **Programme Editing,** and then press **OK.**



Note:
Programmes set in the recording unit for the Assemble editing function cannot be inserted or erased.

Edit Timing Adjustment

When perfoming editing in conjunction with a unit which has a different machanism, there may be a lag in the edit start point due to a deviation between the time a pause cancellation signal is received by the recording unit and the time recording actually begins.
Edit Timing Adjustment is used to compensate the edit start and end time in light of this start-up time deviation.



Programme Editing

After setting edit start/end points, the actual editing operation may start slightly before or slightly after the position that was set, depending on the equipment that is connected. The procedure described below can adjust the edit timing in order to correct for errors of up to ±1 second in the edit start points and edit end points on the playback unit.

Example: Video Insert

Operations

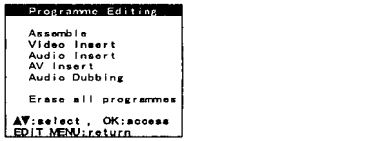
1 Press **EDIT MENU.**

2 Select **Programme Editing**, and then Press **OK.**

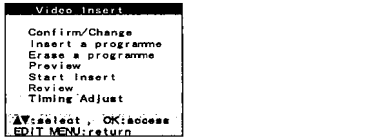
On Screen Display

Notes:
- The procedure described on these pages is to be performed after exiting the EDIT MENU screen. If this procedure is performed after having executed Start Editing or Review, start this procedure from step 4 on the Video Insert (Assemble, Audio Insert, AV Insert or Audio Dubbing) screen.
- The adjusted frame unit is applied to all of the programmes that have been set at the moment when the adjustment is made.

3 Select desired editing operation, and then press **OK** twice.

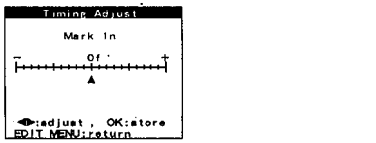


4 Select **Timing Adjust**, and then press **OK.**



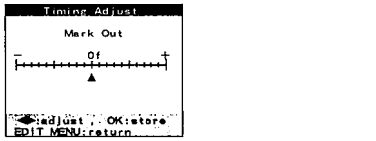
5 Adjust the timing for the edit start point by setting the amount of the discrepancy for the start-up time.
- The setting is displayed in frames (1/25 of a second) units.

Press ▶ if the start point is too early; press ◀ if it is too late.
- Each time the button is pressed, the tape moves by 1 frame.
- Corrections can be made in the range of ± 30 frames.



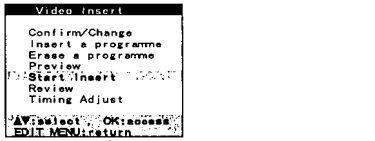
6 Press **OK.**

7 Adjust the timing for the edit end point in same way.



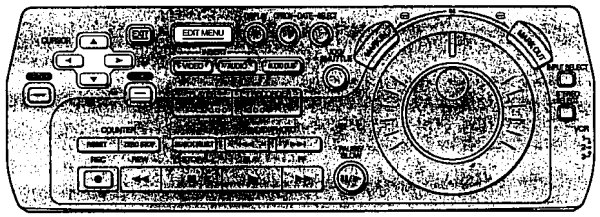
8 Press **OK.**

9 Select **Start Insert (Assemble** or **Dubbing)**, and then press **OK.**



- If the results of editing indicate that the adjustment is inadequate, repeat steps 4-8.

Edit Timing Adjustment (continued)



Manual Editing

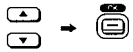
If there is a deviation in the results of a manual editing operation, the timing of the edit start (In) position on the playback unit can be adjusted by approximately ± 1 second. Perform the procedure described below when setting an edit start point in any editing mode.

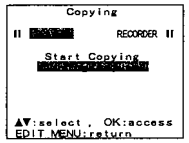
Example: Manual Copying

Operations

On Screen Display

1 Select **Timing Adjust**, and then press **OK.**



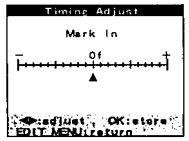


2 Adjust the timing for the edit start point by setting the amount of the discrepancy for the start-up time.

- The setting is displayed in frames (1/25 of a second) units.

Press ▶ if the start point is too early; press ◀ if it is too late.

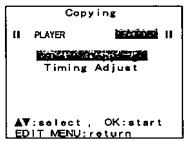
- Each time the button is pressed, the tape moves by 1 frame.
- Corrections can be made in the range of ± 30 frames.



3 Press **OK.**

4 Select **Start Copying (Insert, Dubbing)**, and then press **OK.**

- If the results of editing indicate that the adjustment is inadequate, repeat steps 1-3.



On Screen Display Messages

Before requesting service, check the following points once again.
The error message is indicated in brackets [ ].

These messages are displayed in the language that is set for On Screen Display.

[This action is not possible before time and date are set.]
☞ **SHOWVIEW** or **CHECK** is pressed when the date and time are not set. Set date and time.

[Please insert video tape!]
☞ **REC (REC/OTR), DIRECT TV REC, ▷ (PLAY), ▶▶ (FAST FORWARD)** or **◀◀ (REWIND)** is pressed when no cassette is in the VCR. Insert a video cassette.

[Recording not allowed.Check setting of the record-prevention tab.]
☞ **REC (REC/OTR)** or **DIRECT TV REC** has been pressed when using a cassette with the opened record-prevention tab. Use a cassette with the closed record-prevention tab.

[No timer programmes to be done!]
☞ **TIMER REC** was pressed even though nothing has been programmed. Programme a timer recording.

[Please put VCR into stop mode first.]
☞ Changes to programming details were attempted during timer recording.

Messages of On Screen Display for Editing Operations

These messages are displayed in English regardless of the set for On Screen Display.

[Please insert video tape!]
☞ **REC (REC/OTR), ▷ (PLAY)** or **JOG/SHUTTLE** has been pressed when the editing operation using EDIT MENU screen is performed in the VCR. Insert a video cassette.

[Recording not allowed.Check setting of the record-prevention tab.]
☞ **REC (REC/OTR)** has been pressed when using a cassette with the opened record-prevention tab. Use a cassette with a closed record-prevention tab.

[This function cannot be made in the blank part of the tape.]
☞ Are you trying to edit using a blank tape, or a tape that contains a blank segment in the middle?
Editing is not possible in blank segments (because there are no Time codes). In order to use such a tape for editing, copy the tape once so that continuous Time codes are recorded on the tape, even if there is nothing else recorded on the tape.

[This function is not allowed in LP-recorded section of the tape.]
☞ It is not possible to edit a tape that was recorded in LP mode, or that was recorded partly in SP mode and partly in LP mode. Make a copy of the tape in SP mode and then use that tape.

[This function cannot be made with 16bit mode audio recording.]
☞ Does the audio mode change in the middle of the tape?
The Audio Dubbing and AV Insert functions can only be used on a tape that was recorded in 12bit audio mode.

[Copying of this material is not allowed.]
☞ Tapes which contain copy protection codes cannot be edited, whether in the playback unit or the recording unit.

[EDITING cannot be made. Please check switches setting and cables.]
☞ Are the necessary cables for controlling the playback unit (Edit cable, LANC cable, DV cable) connected?
☞ Is the playback unit turned off?
☞ Are **EDIT MODE**, **EDIT CONTROL**, and the **INPUT SELECT** setting on the AG-DV2700 set properly for the desired editing operation?
☞ Is there more than one digital video device (including personal computers) connected to the AG-DV2700?
☞ Are the AG-DV2700 and the unit connected to the AG-DV2700 both set to control each other (if the connected unit is a digital video device)?

[Audio Dubbing or Audio Mixing cannot be made with DV input mode.]
☞ Audio Dubbing and Audio Mixing functions will not work if **INPUT SELECT** is set to DV IN. Set to A2 or A3.

[AV Insert cannot be made with DV input mode.]
☞ AV Insert will not work if **INPUT SELECT** is set to DV IN. Set to A2 or A3.

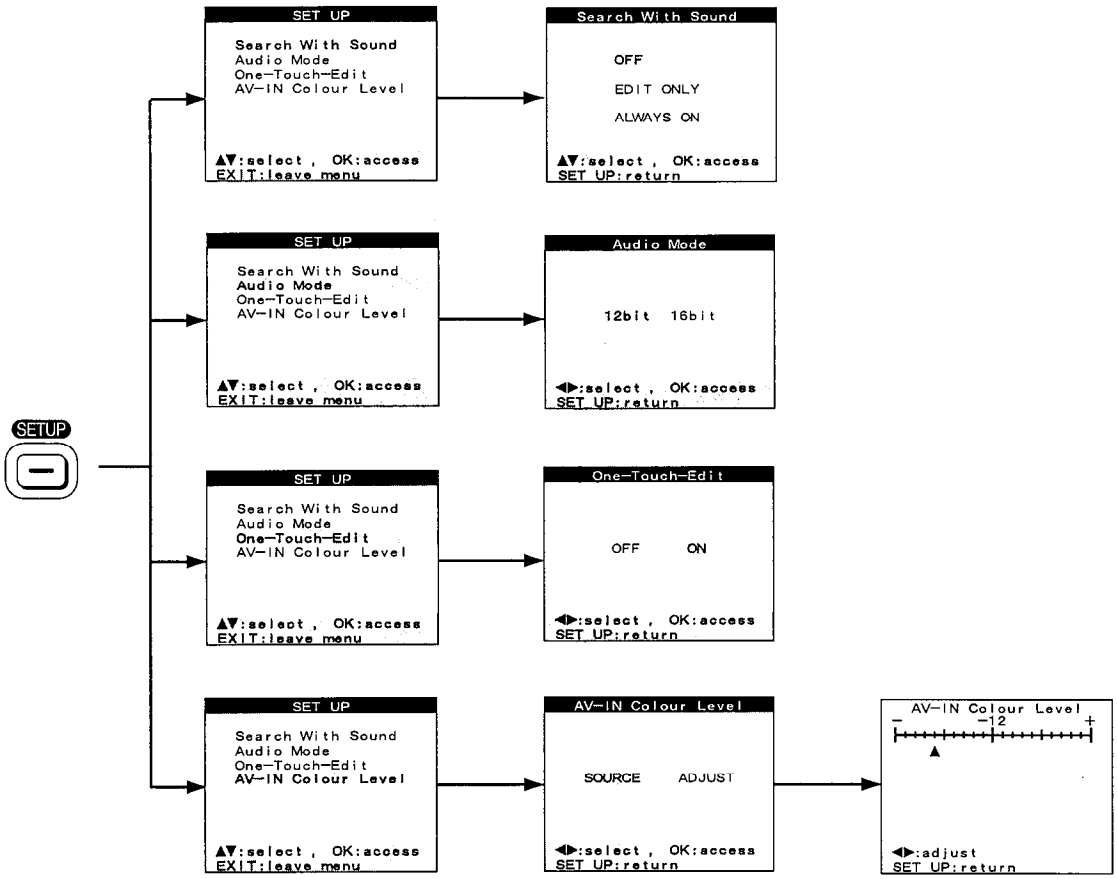
[Please select DV input mode.]
☞ Is **EDIT CONTROL** set to DV, but **INPUT SELECT** is set to something other than DV IN?

[This tape is an incorrect type. Please replace the tape.]
☞ A video cassette tape other than a DV or MINI DV cassette has been inserted.
DVCPRO cassettes cannot be used with the AG-DV2700.

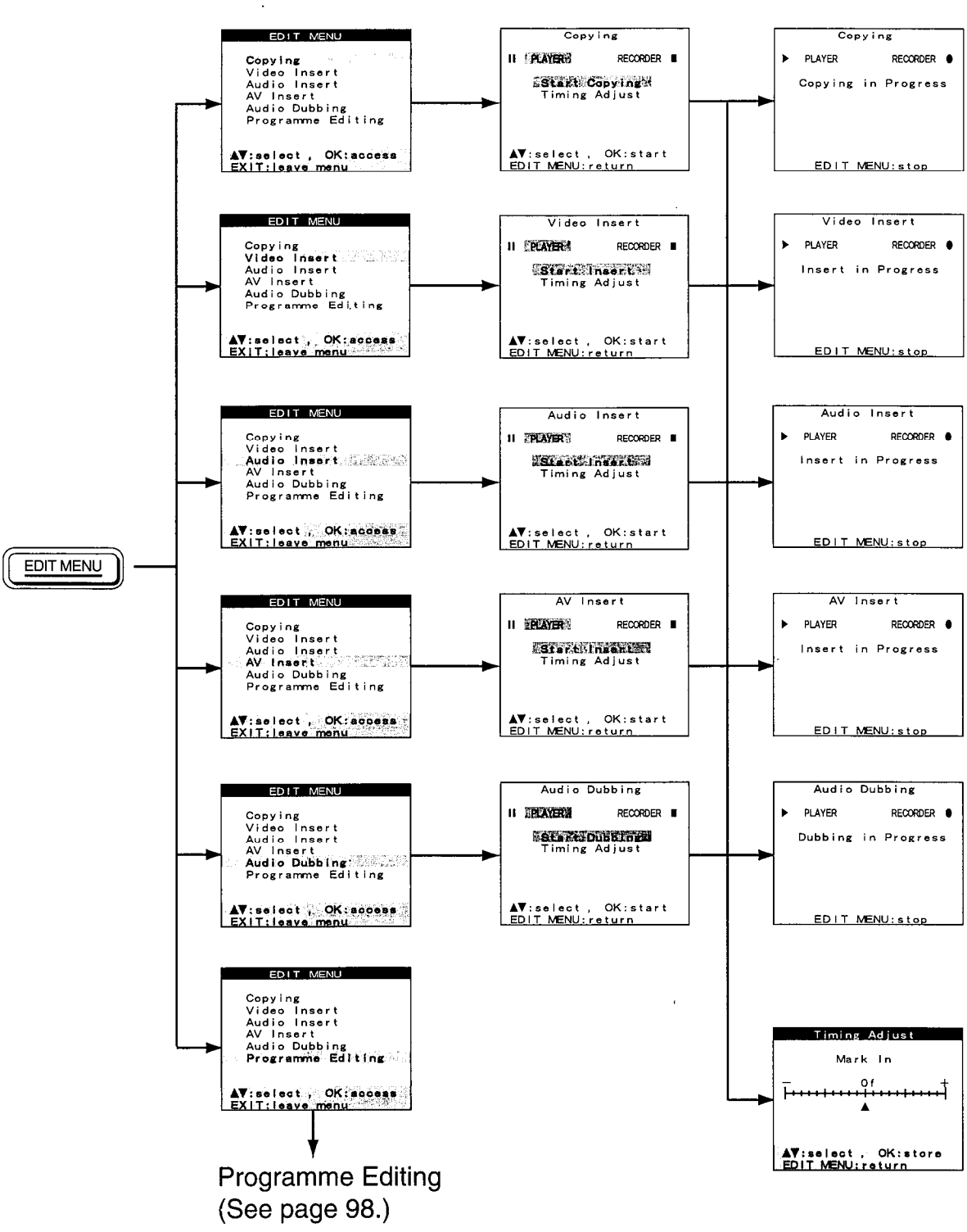
Other messages may also appear.
Follow the instructions in the message.

Flow Chart for On Screen Displays

SET UP On Screen Display

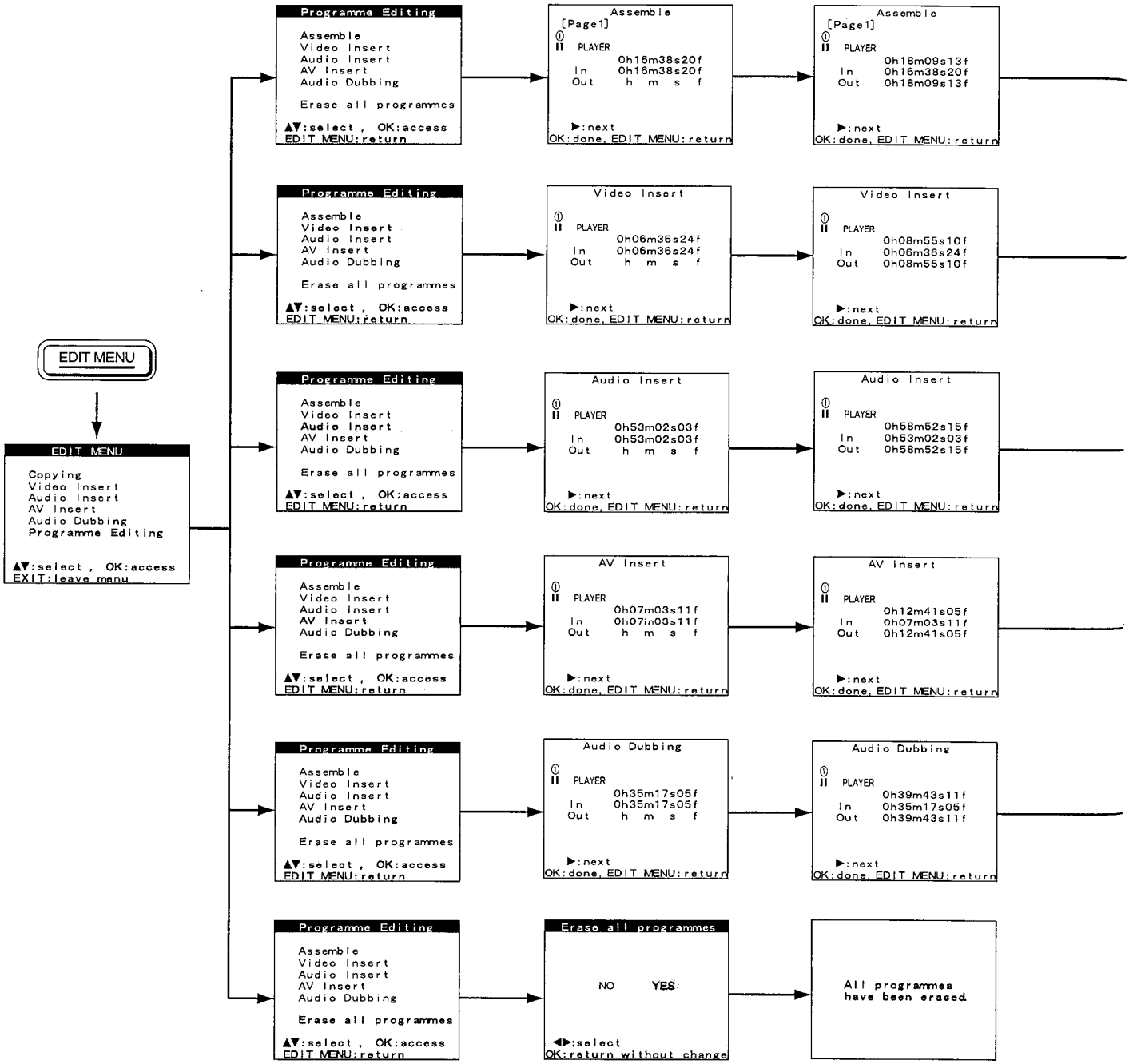


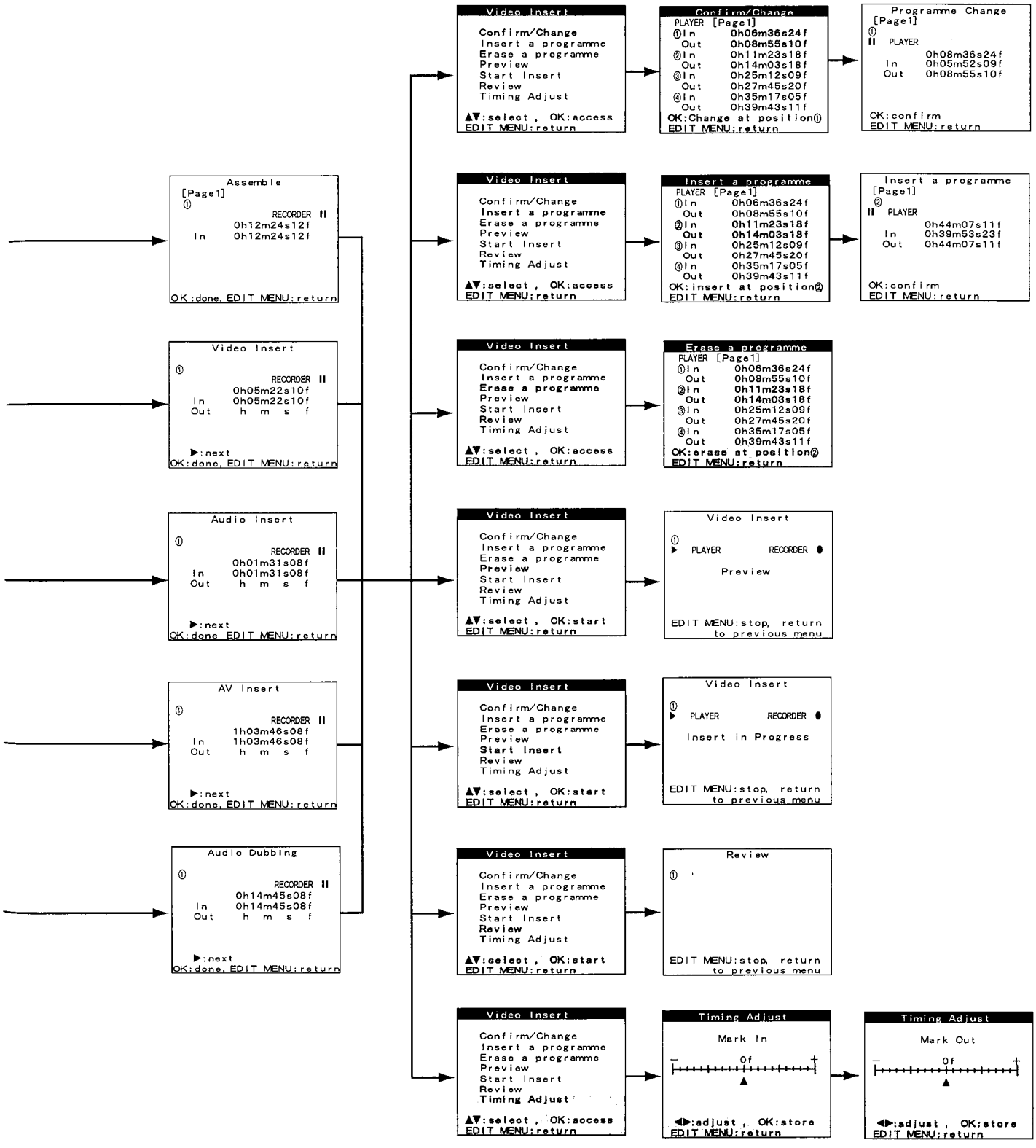
EDIT MENU On Screen Display (Manual Editing)



Flow Chart for On Screen Displays (continued)

Programme Editing On Screen Display




Assemble
[Page1]
①
RECORDER II
0h12m24s12f
In 0h12m24s12f
OK:done, EDIT MENU:return
Video Insert
①
RECORDER II
0h05m22s10f
In 0h05m22s10f
Out h m s f
▶:next
OK:done, EDIT MENU:return
Audio Insert
①
RECORDER II
0h01m31s08f
In 0h01m31s08f
Out h m s f
▶:next
OK:done EDIT MENU:return
AV Insert
①
RECORDER II
1h03m46s08f
In 1h03m46s08f
Out h m s f
▶:next
OK:done, EDIT MENU:return
Audio Dubbing
①
RECORDER II
0h14m45s08f
In 0h14m45s08f
Out h m s f
▶:next
OK:done, EDIT MENU:return
Video Insert
Confirm/Change
Insert a programme
Erase a programme
Preview
Start Insert
Review
Timing Adjust
▲▼:select , OK:access
EDIT MENU:return
Confirm/Change
PLAYER [Page1]
①In 0h08m36s24f
Out 0h08m55s10f
②In 0h11m23s18f
Out 0h14m03s18f
③In 0h25m12s09f
Out 0h27m45s20f
④In 0h35m17s05f
Out 0h39m43s11f
OK:Change at position①
EDIT MENU:return
Programme Change
[Page1]
①
II PLAYER
0h08m36s24f
In 0h05m52s09f
Out 0h08m55s10f
OK:confirm
EDIT MENU:return
Video Insert
Confirm/Change
Insert a programme
Erase a programme
Preview
Start Insert
Review
Timing Adjust
▲▼:select , OK:access
EDIT MENU:return
Insert a programme
PLAYER [Page1]
①In 0h06m36s24f
Out 0h08m55s10f
②In 0h11m23s18f
Out 0h14m03s18f
③In 0h25m12s09f
Out 0h27m45s20f
④In 0h35m17s05f
Out 0h39m43s11f
OK:insert at position②
EDIT MENU:return
Insert a programme
[Page1]
②
II PLAYER
0h44m07s11f
In 0h39m53s23f
Out 0h44m07s11f
OK:confirm
EDIT MENU:return
Video Insert
Confirm/Change
Insert a programme
Erase a programme
Preview
Start Insert
Review
Timing Adjust
▲▼:select , OK:access
EDIT MENU:return
Erase a programme
PLAYER [Page1]
①In 0h06m36s24f
Out 0h08m55s10f
②In 0h11m23s18f
Out 0h14m03s18f
③In 0h25m12s09f
Out 0h27m45s20f
④In 0h35m17s05f
Out 0h39m43s11f
OK:erase at position②
EDIT MENU:return
Video Insert
Confirm/Change
Insert a programme
Erase a programme
Preview
Start Insert
Review
Timing Adjust
▲▼:select , OK:start
EDIT MENU:return
Video Insert
①
▶ PLAYER RECORDER
Preview
EDIT MENU:stop, return
to previous menu
Video Insert
Confirm/Change
Insert a programme
Erase a programme
Preview
Start Insert
Review
Timing Adjust
▲▼:select , OK:start
EDIT MENU:return
Video Insert
①
▶ PLAYER RECORDER
Insert in Progress
EDIT MENU:stop, return
to previous menu
Video Insert
Confirm/Change
Insert a programme
Erase a programme
Preview
Start Insert
Review
Timing Adjust
▲▼:select , OK:start
EDIT MENU:return
Review
①
EDIT MENU:stop, return
to previous menu
Video Insert
Confirm/Change
Insert a programme
Erase a programme
Preview
Start Insert
Review
Timing Adjust
▲▼:select , OK:access
EDIT MENU:return
Timing Adjust
Mark In
– 0f +
◀▶:adjust , OK:store
EDIT MENU:return
Timing Adjust
Mark Out
– 0f +
◀▶:adjust , OK:store
EDIT MENU:return

Memo

SECTION 2
ADJUSTMENT PROCEDURES

1. Disassembly/Assembly Procedures for cabinet parts, C.B.A. and Mechanism Unit

1-1. Disassemble Flow Chart for cabinet parts, C.B.A. and Mechanism Unit.

This flow chart indicates the disassembly steps the cabinet parts, C.B.A. and Mechanism Unit in order to access to items to be serviced. When reinstalling, perform the steps in reverse order.

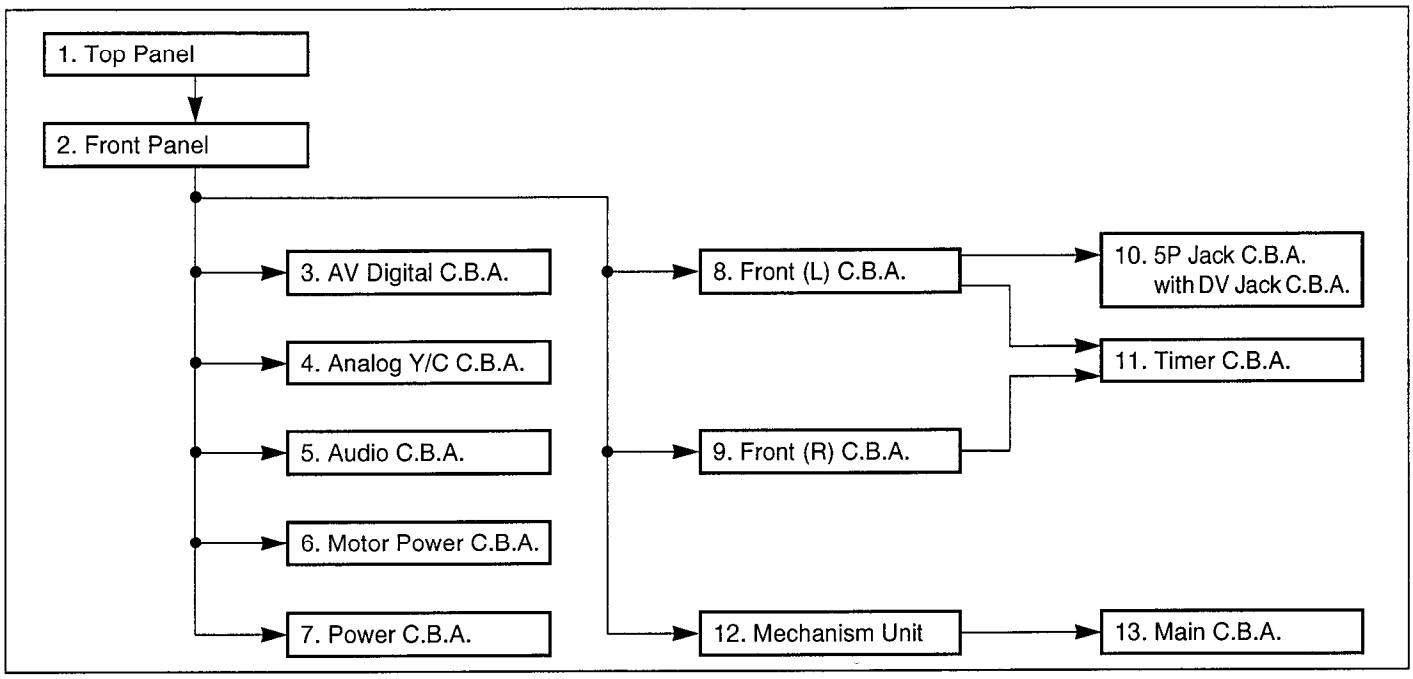


Fig. 1-1 Flow Chart

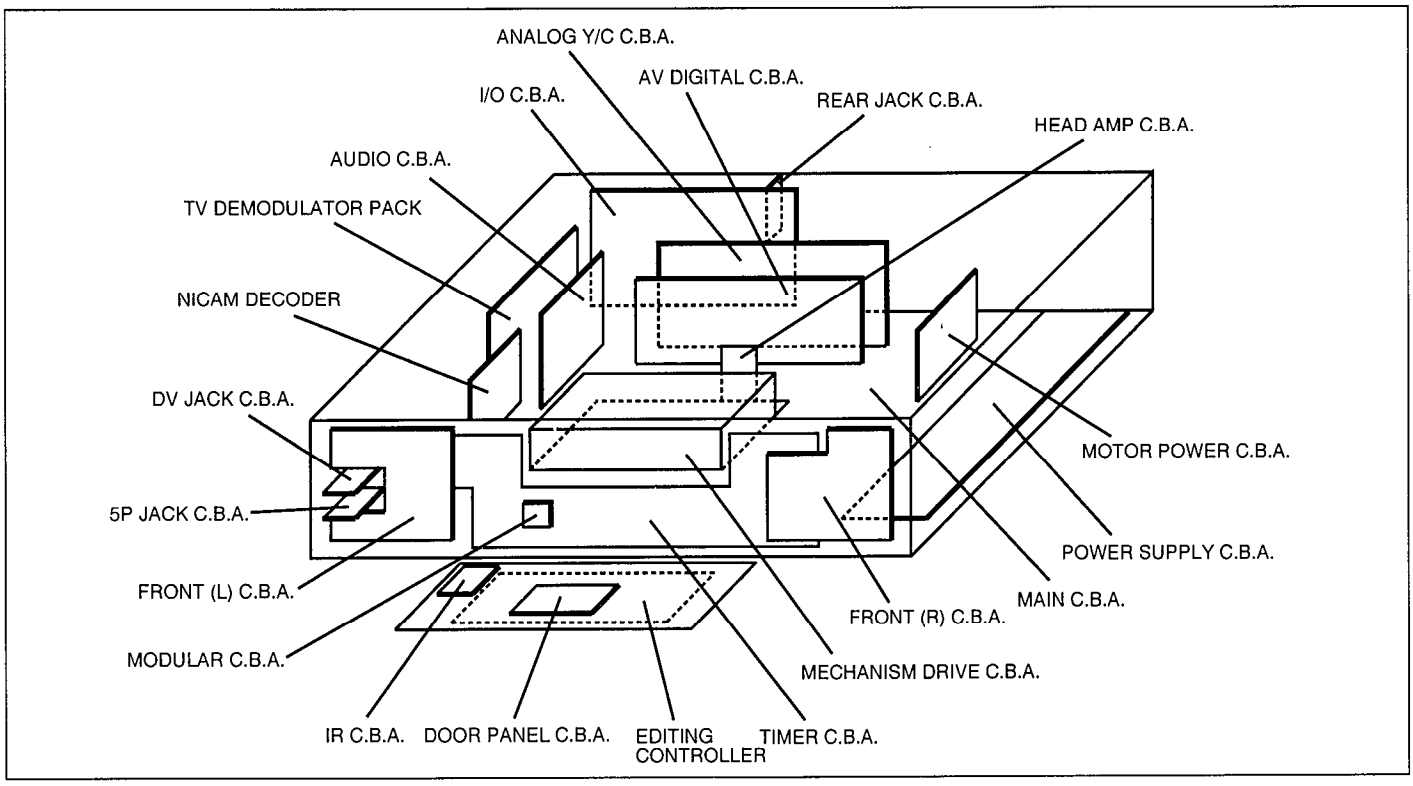


Fig. 1-2

1-2. Disassembly/Assembly Procedures (for cabinet parts, C.B.A. and Mechanism Unit)

No.	ITEM / PART	FIG.	REMOVAL (SCREW)
1	Top Panel	Fig. D-1	4-Screws (A) 1-Screw (B) Remove Side Plate (6 Hooks).
2	Front Panel	Fig. D-2 Fig. D-3	2-Screws (C) 1-Connector (P3701) 9-Locking Tabs (a) When Front Panel is installed, confirm the Connector P7504.
3	AV Digital C.B.A.	Fig. D-6 Fig. D-5	2-Screws (D) 2-Connectors (FP3201, P3701) **Note 1:** When the EVR Connection C.B.A. is installed, confirm the arrow direction on C.B.A..
4	Analog Y/C C.B.A.	Fig. D-6	2-Screws (E)
5	Audio C.B.A.	Fig. D-6	**Note 2:** 2-Locking Tabs (b)
6	Motor Power C.B.A.	Fig. D-6	1-Connector (P2502) **Note 2:** 2-Locking Tabs (c)
7	Power C.B.A.	Fig. D-6	1-Connector (P1102) 7-Locking Tabs (d)
8	Front (L) C.B.A.	Fig. D-3	1-Connector (P4851) 2-Locking Tabs (e)
9	Front (R) C.B.A.	Fig. D-3	1-Screw (F) 1-Connector (P4801) 2-Locking Tabs (f)
10	5P Jack C.B.A. & DV Jack C.B.A.	Fig. D-5	1-Screw (G) 2-Connectors (P3781, P7651) 1-Locking Tab (g)
11	Timer C.B.A.	Fig. D-4	3-Connectors (P7501, P7502, P7503) 6-Locking Tabs (h)
12	Mechanism Unit	Fig. D-5	Remove the Tray Angle. Set the Mechnism to the "Eject" position. 4-Connectors (P2705, FP5002, P6504, P6505) 3-Screws (H)
13	Main C.B.A.	Fig. D-6	4-Screws (D/E) 2-Screws (I) 4-Screws (J) 7-Locking Tabs (i)

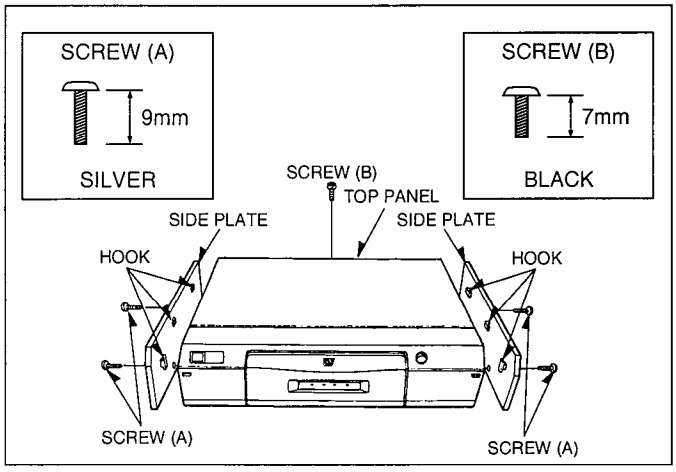


Fig. D-1

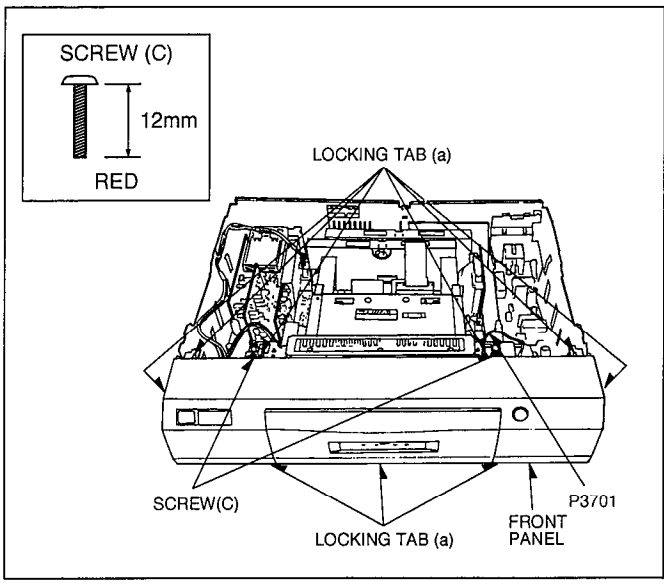


Fig. D-2

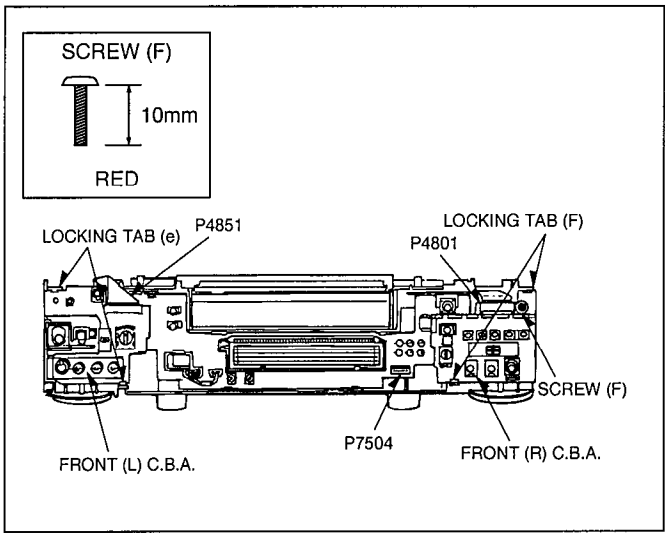


Fig. D-3

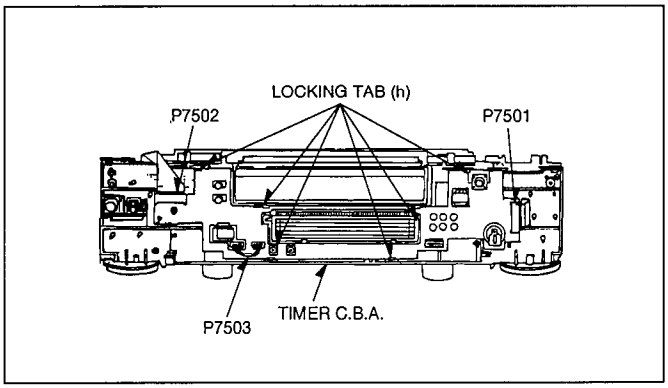


Fig. D-4

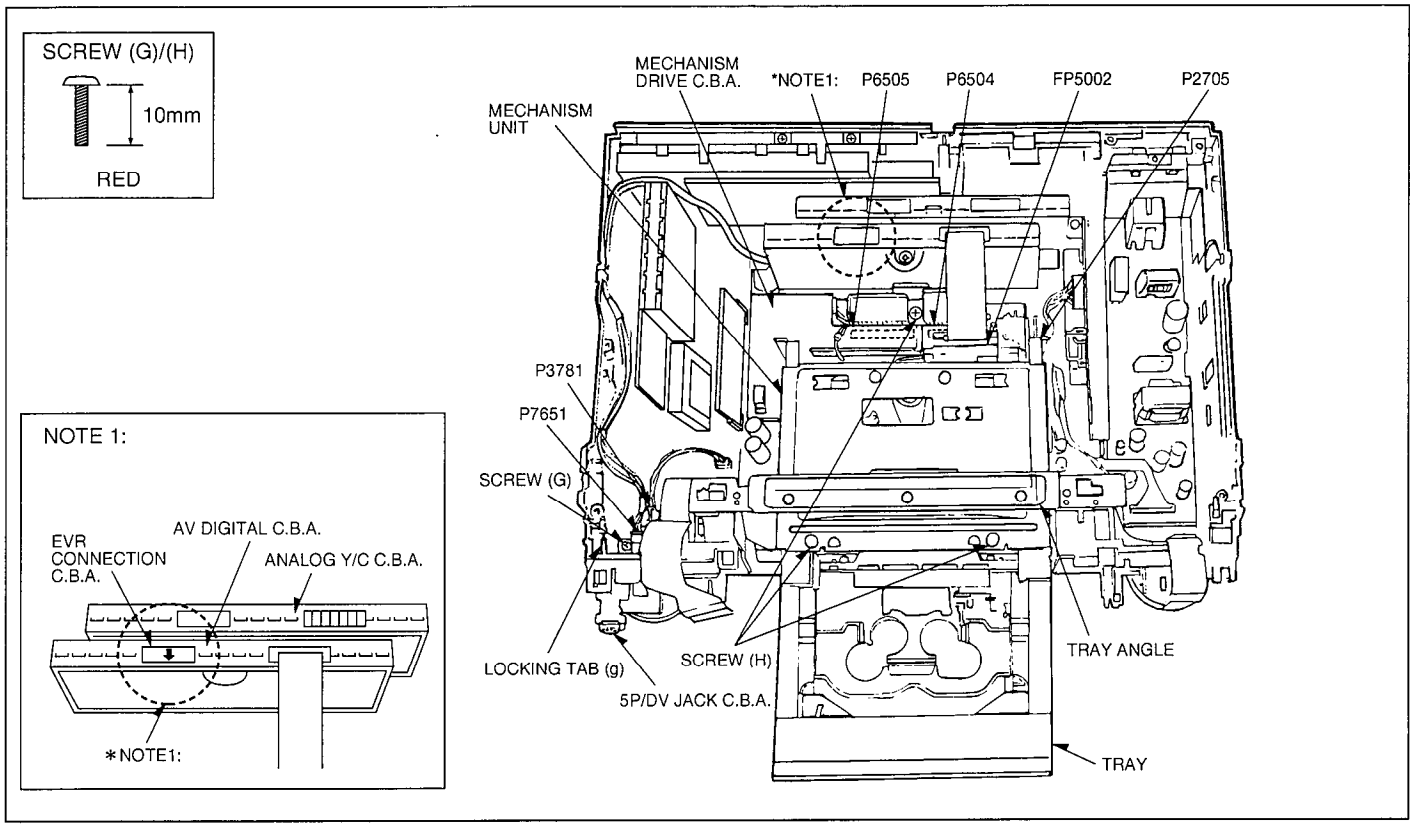

SCREW (G)/(H)
10mm
RED
NOTE 1:
AV DIGITAL C.B.A.
EVR CONNECTION C.B.A.
ANALOG Y/C C.B.A.
*NOTE1:
MECHANISM DRIVE C.B.A.
*NOTE1:
P6505
P6504
FP5002
P2705
MECHANISM UNIT
P3781
P7651
SCREW (G)
LOCKING TAB (g)
SCREW (H)
5P/DV JACK C.B.A.
TRAY ANGLE
TRAY

Fig. D-5

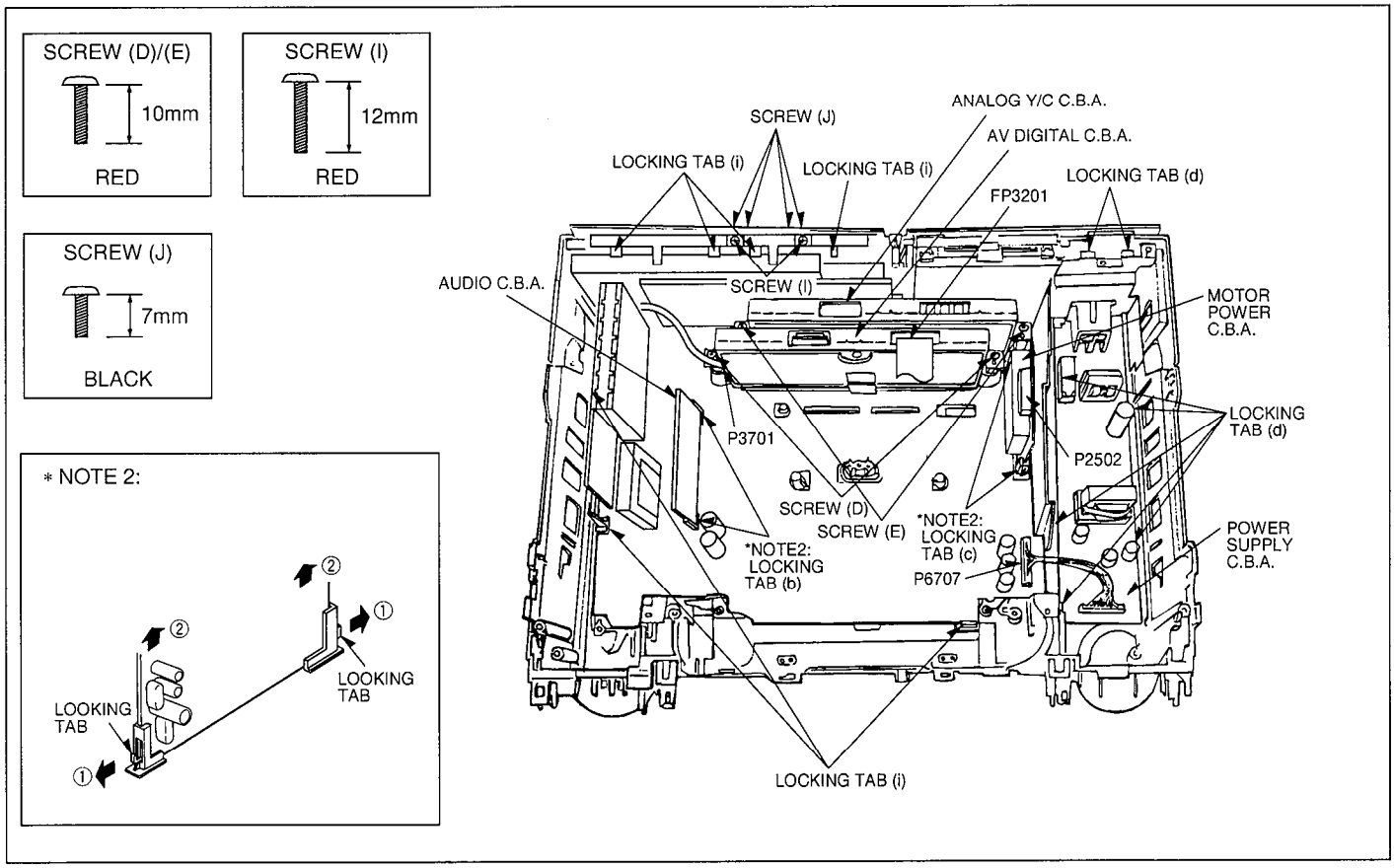

SCREW (D)/(E)
10mm
RED
SCREW (I)
12mm
RED
SCREW (J)
7mm
BLACK
* NOTE 2:
LOOKING TAB
LOOKING TAB
ANALOG Y/C C.B.A.
SCREW (J)
AV DIGITAL C.B.A.
LOCKING TAB (i)
LOCKING TAB (i)
LOCKING TAB (d)
FP3201
AUDIO C.B.A.
SCREW (I)
MOTOR POWER C.B.A.
P3701
LOCKING TAB (d)
P2502
SCREW (D)
SCREW (E)
*NOTE2: LOCKING TAB (b)
*NOTE2: LOCKING TAB (c)
P6707
POWER SUPPLY C.B.A.
LOCKING TAB (i)

Fig. D-6

2. Disassembly/Assembly Procedures for Mechanism

2-1. Disassemble Flow Chart for Mechanism

This procedure starts with the condition that the mechanism unit has been removed from the unit.
The following chart indicates disassembly steps of the mechanical parts in order to gain access to part for servicing. When reinstalling, perform the steps in reverse order.

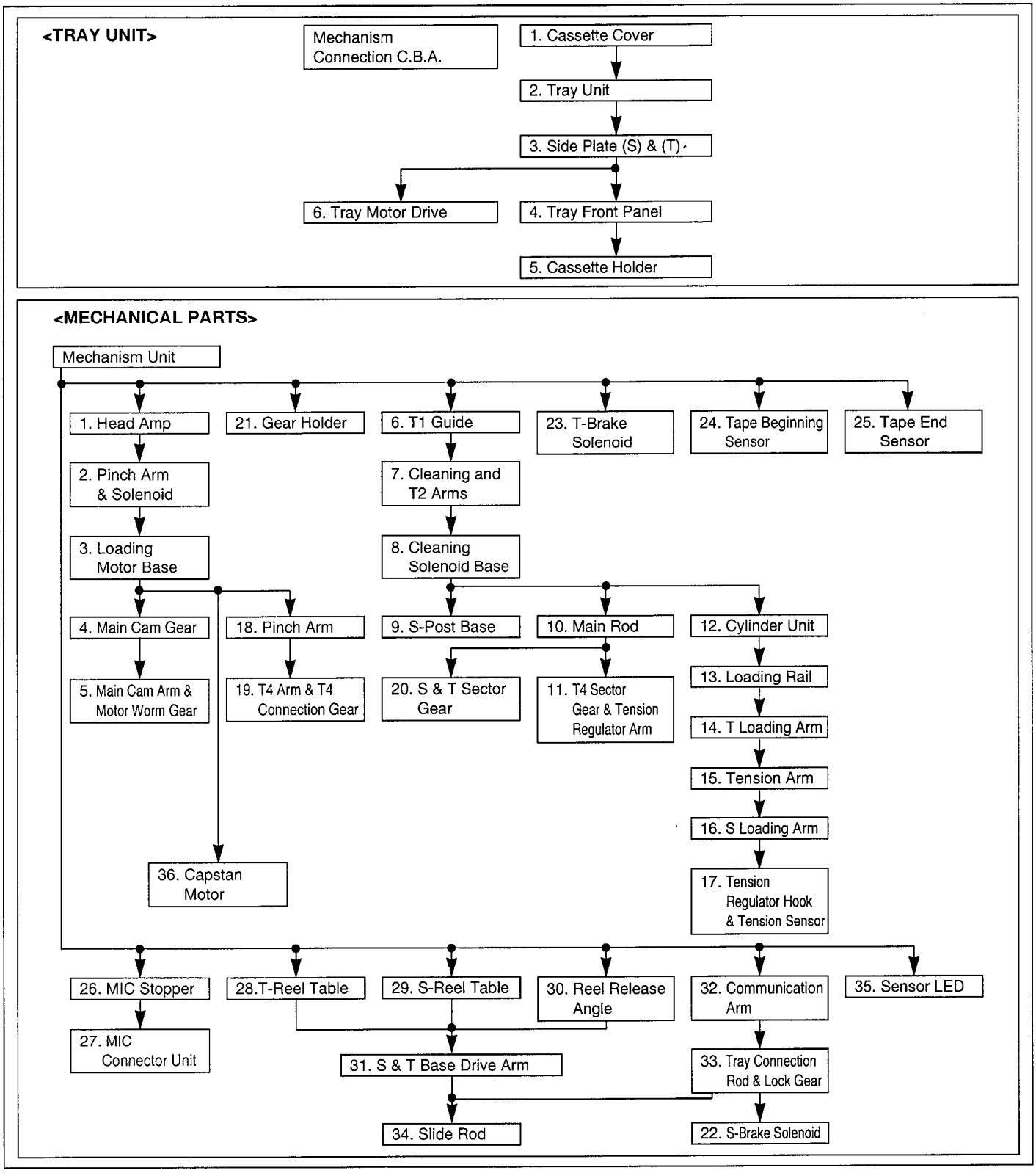


Fig. 2-1 Flow Chart

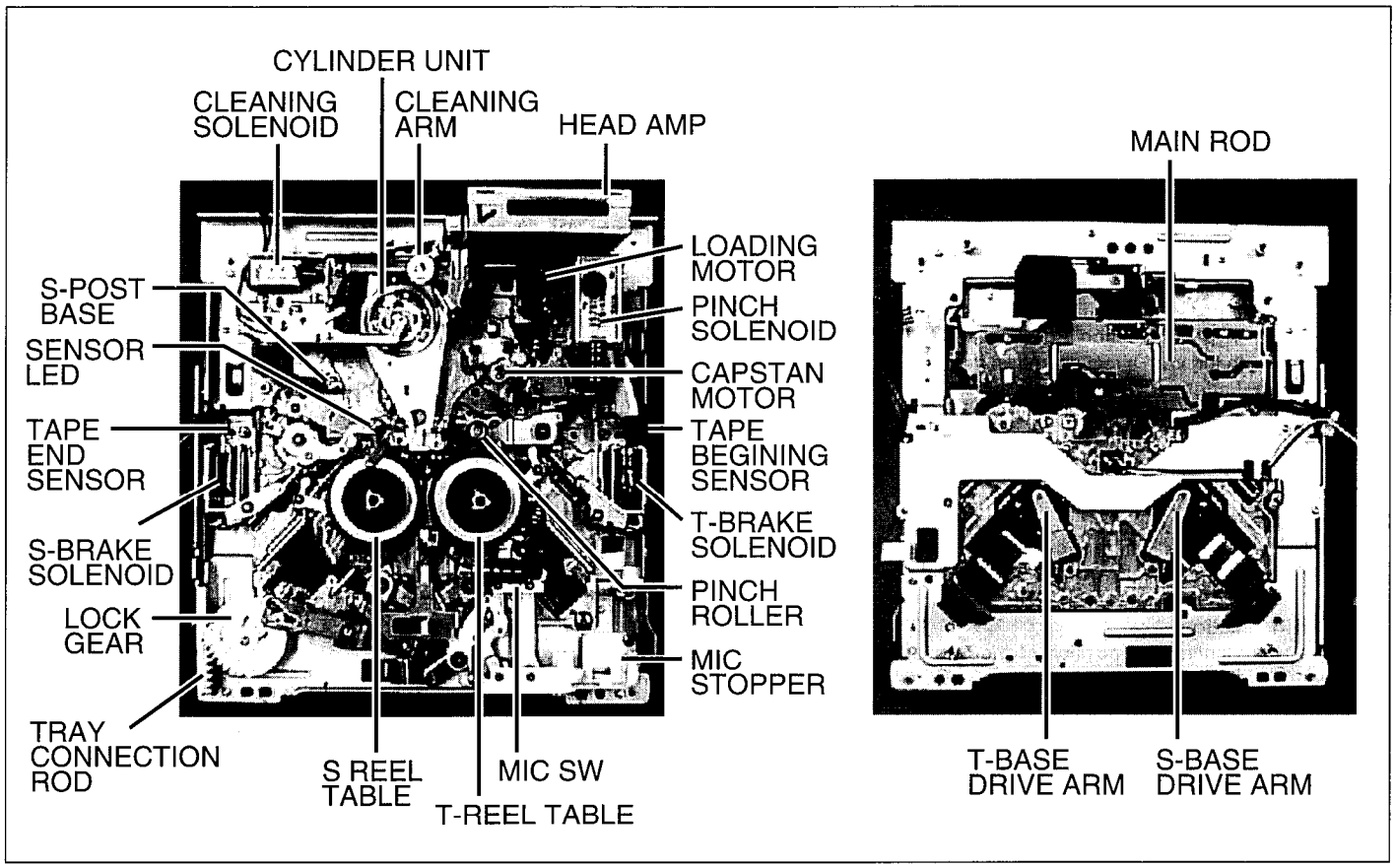


Fig. 2-2

2-2. Disassembly/Assembly Procedures (for Mechanical Parts)

1. Mechanism Connection C.B.A.

Unscrew 4 screws and disconnect following connectors.

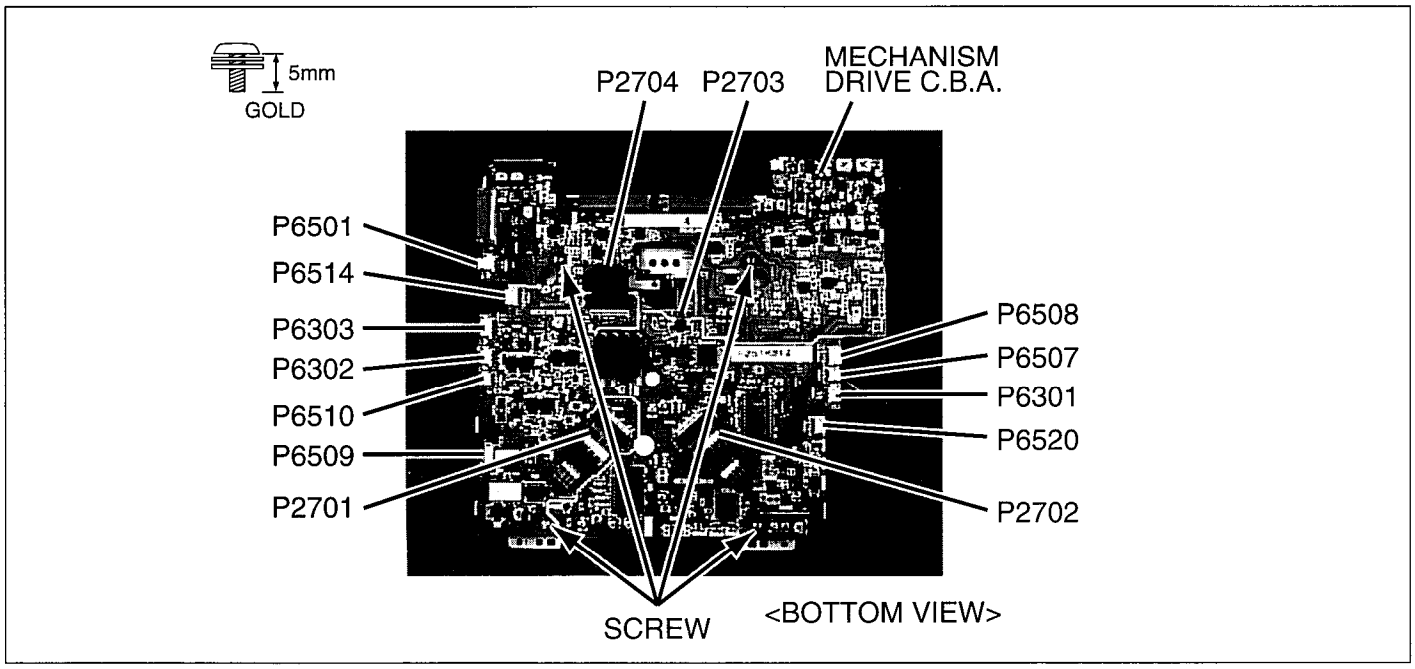


Fig. 2-3

2. Tray Unit

2-1. Cassette Cover

Fig. T-1 Set the Mechanism to Tray open position. Unscrew 2 screws (A), then slide the Cassette Cover and unhook the hooking portion.

Fig. T-2 When the Tray can not be opened normally, slowly turn the Tray Drive Shaft until the Tray is fully opened

2-2. Tray Unit

Fig. T-3 Unscrew 4 screws (B) and disconnect P6502 when Mechanism Drive C.B.A. is connected to Mechanism Unit.

Fig. T-4 Since the Side Plate (S) is located underneath the Tray Connection Rod, then shift the Side Plate (S) in the front direction and lift it up.

Note of installation

Fig. T-5 Push the Tray Connection Rod in the rear direction and install the Tray Unit so that the Reel Shaft on the Side Plate (S) meets the groove on the Tray Connection Rod.

2-3. Side Plate (S) and (T)

Fig. T-6 Set the Pinion Gear so that the projection (A) is aligned to the Dot Mark on the Rack (S) and (T) and remove the Side Plate (S) and (T).

Note of installation

Fig. T-10 Confirm the position of the Cassette Change Lever. (Down position)

Fig. T-7 Install the Pinion Gear so that the projection (B) on the pinion Gear is aligned to the hole on the Tray Drive Shaft Gear.

Fig. T-6 Install the Side Plate (S) and (T) so that the projection (A) is aligned to the dot mark on the Rack (S) and (T).

2-4. Tray Front Panel

Fig. T-8 Unscrew 2 screws (C) and unlock 4 locking tabs (A), then remove the Tray Front Panel.

2-5. Cassette Holder

Fig. T-9 Slightly open the S and T Rack Unit and slowly remove the Cassette Holder from the Groove on the S and T Rack Unit.

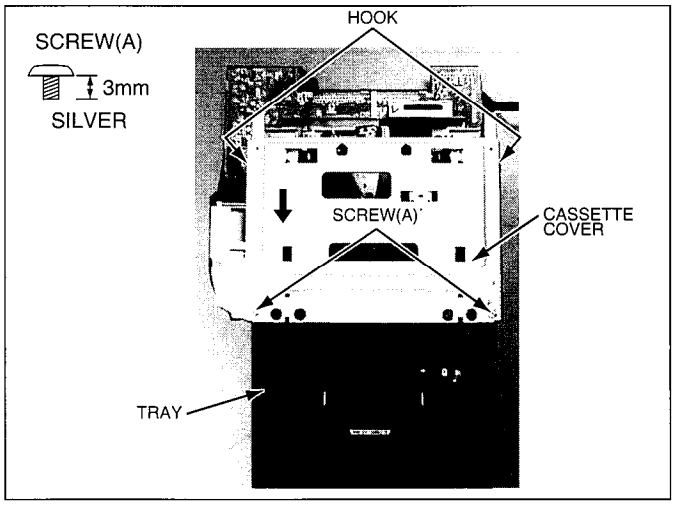


Fig. T-1

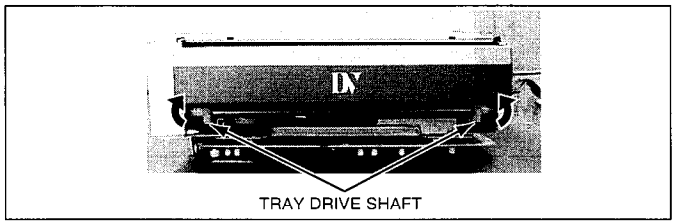


Fig. T-2

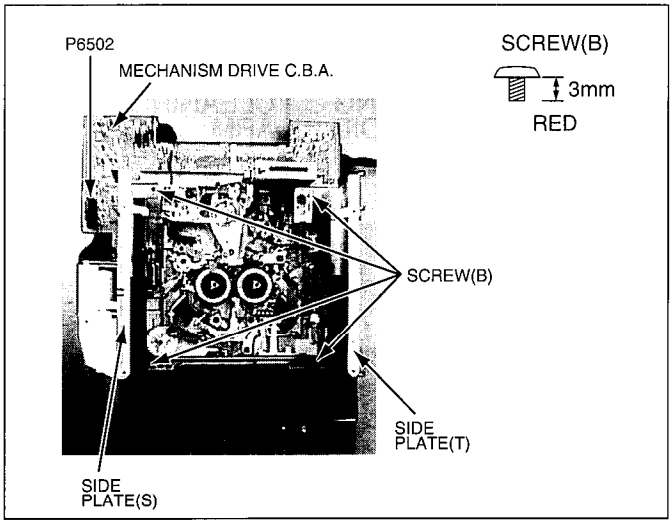


Fig. T-3

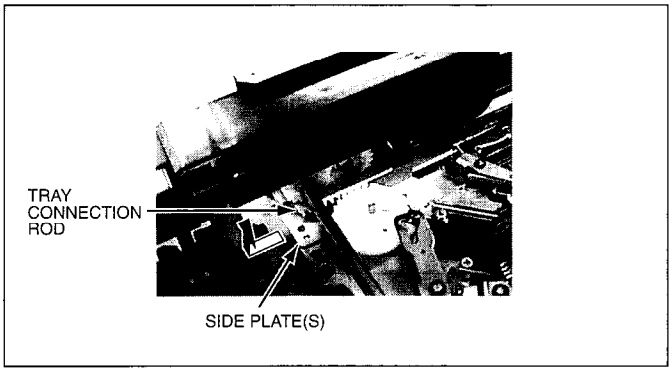


Fig. T-4

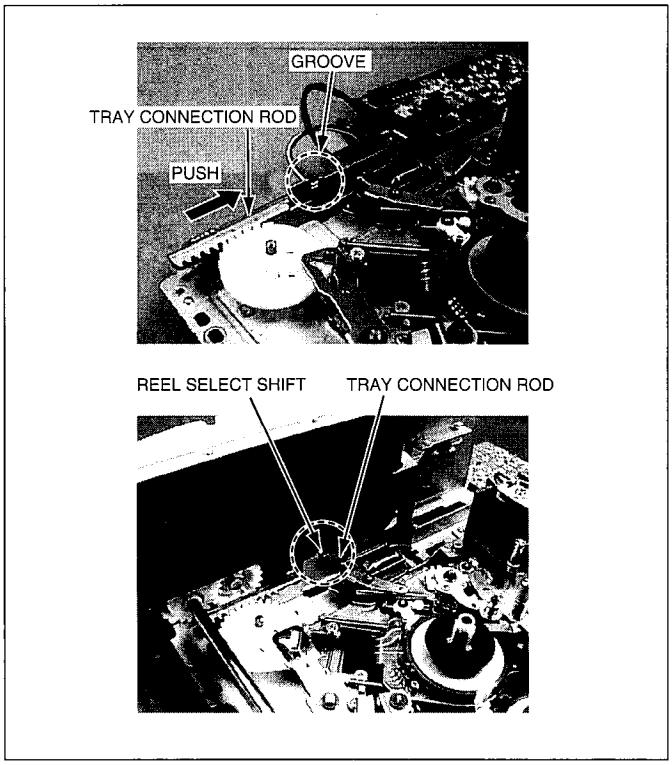


Fig. T-5

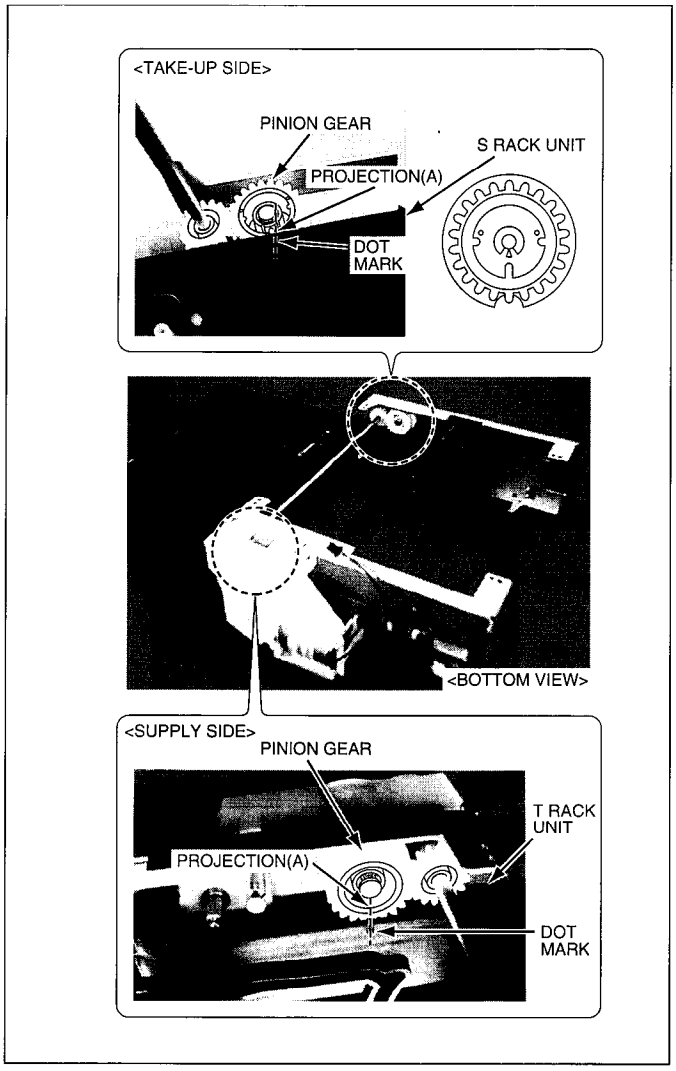


Fig. T-6

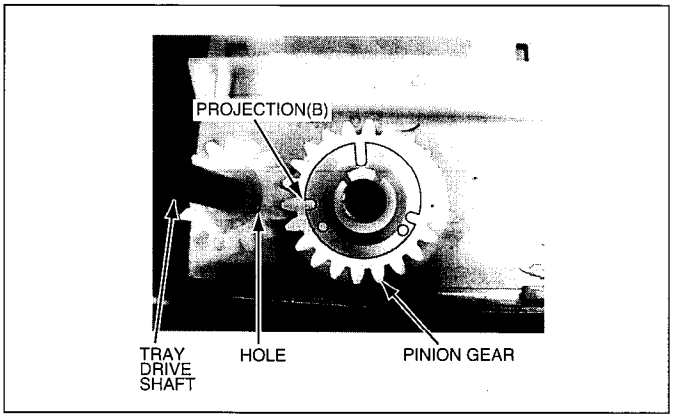


Fig. T-7

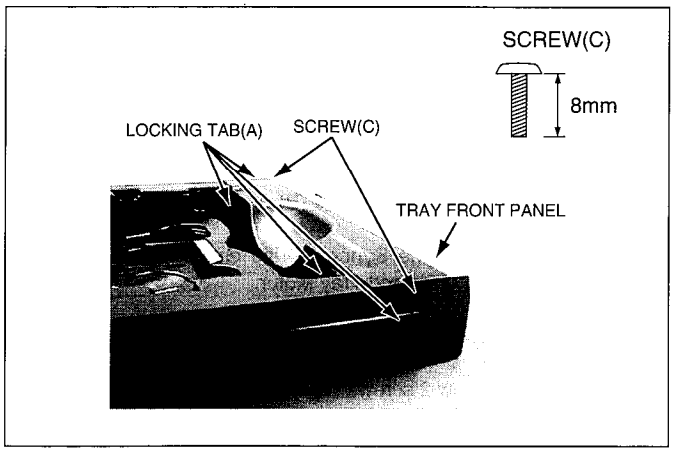


Fig. T-8

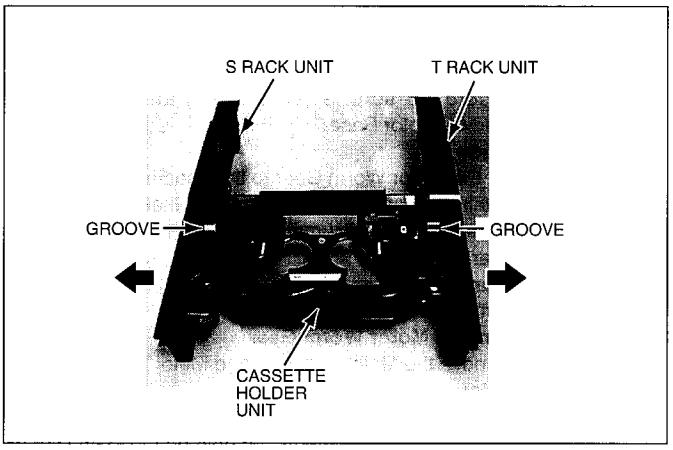


Fig. T-9

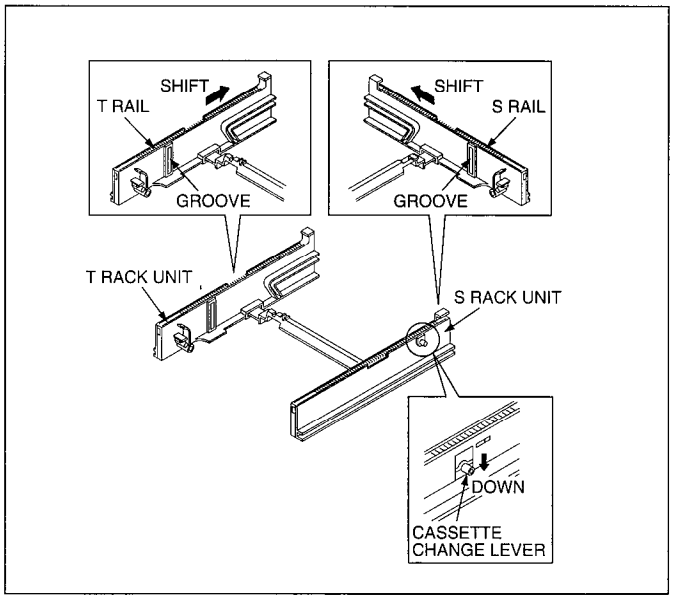


Fig. T-10

Note of installation

Fig. T-10 Shift the S and T Rail on the S and T Rack Unit to makethe Tray down condition.

Fig. T-11 Install the Cassette Holder Unit so that the projection (C) on the Cassette Holder meets the groove on the S and T Rack unit.

2-6. Tray Motor Drive Unit

Fig. T-12 Unlock 3 locking tabs (B) and remove the Tray Motor Drive Unit.

Fig. T-13 Remove the Syncro. Drive Gear, Worm Foil Gear, Worm Gear and Tray Motor.

3. Mechanical Parts

3-1. Head AMP

Fig. M-1 Unscrew 2 screws (E).

Fig. M-2 Slide the Shield Case in up direction and remove the Shield Case.
Disconnect FP5001.

3-2. Pinch Solenoid and Pinch Arm

Fig. M-3 Unscrew 2 screws (F) and remove Cut Washer.
Shift the Pinch Solenoid in left direction and remove thePinch Solenoid and Pinch Arm.

3-3. Loading Motor Base

Fig. M-4 Unscrew 5 screws (G) and (H) and remove the Loading Motor Base.

Note of installation

Fig. M-7 Set the Motor Worm Gear to the Loading Motor Shaft.

Fig. M-5 Install the Loading Motor Base so that the projection (D)on the Mode SW meets the Hole on the Main Cam Gear.

3-4. Main Cam Gear

Fig. M-6 Remove the Main Cam Gear.

3-5. Main Cam Arm and Motor Worm Gear

Fig. M-7 Remove the Main Cam Arm and Motor Worm Gear.

Note of installation

Fig. M-8 Install the Main Cam Arm so that the projection (E) on the Main Cam Arm meets the hole on the Main Rod.

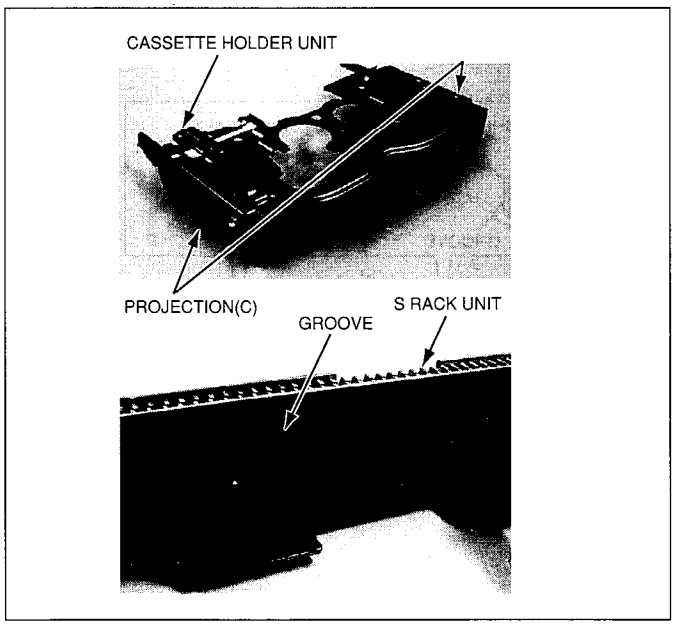
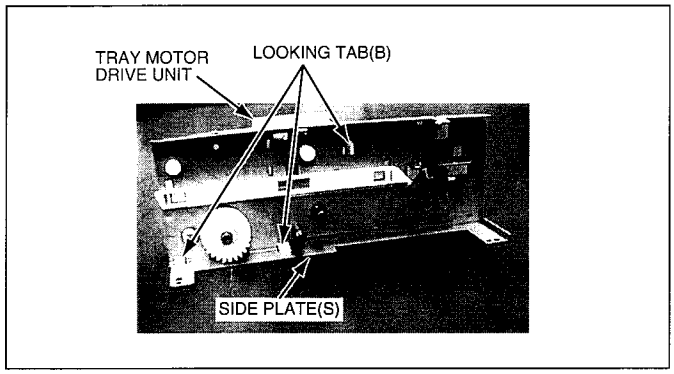


Fig. T-11



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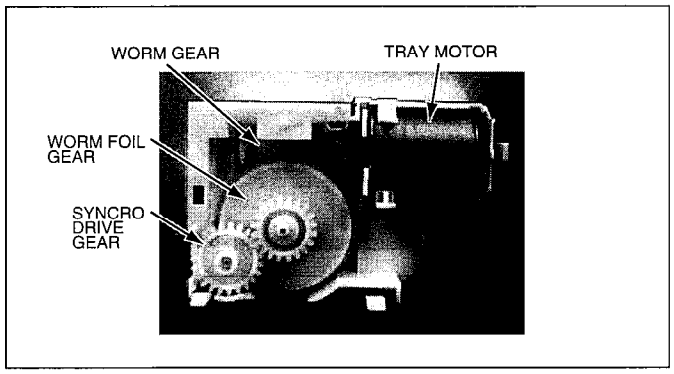

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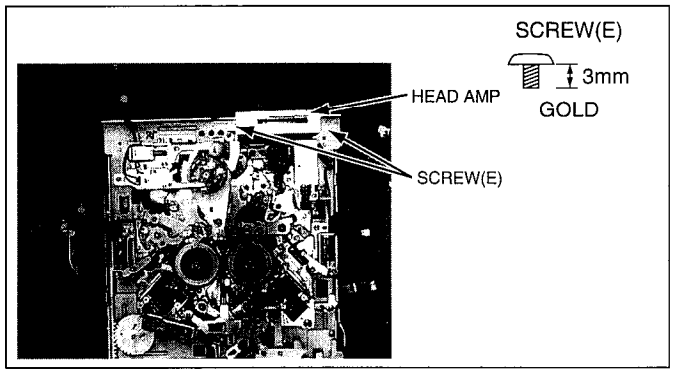

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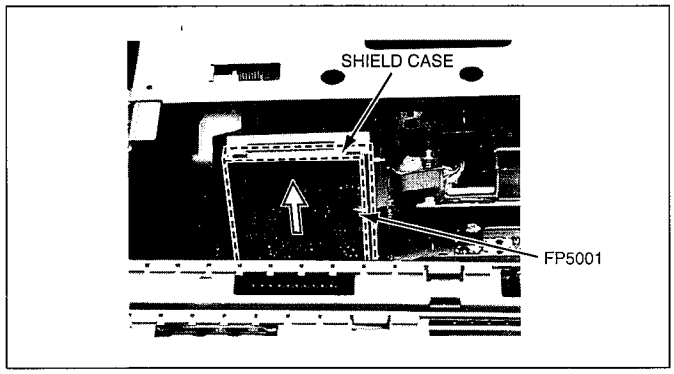
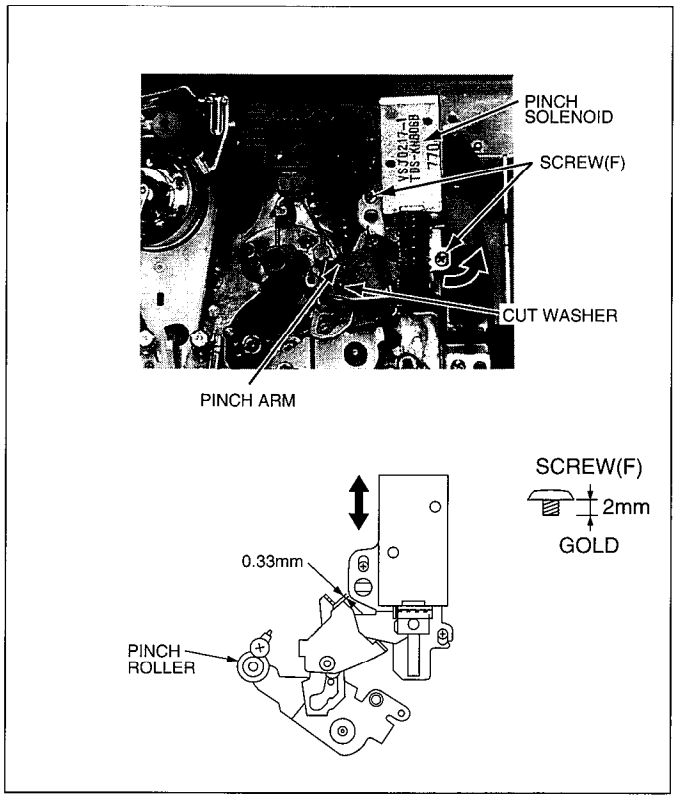


Fig. M-2



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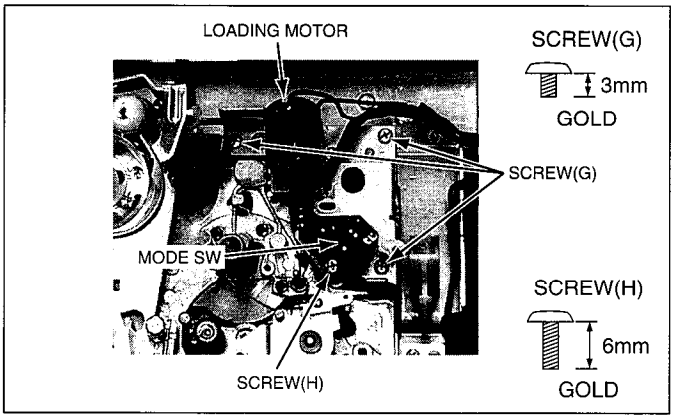

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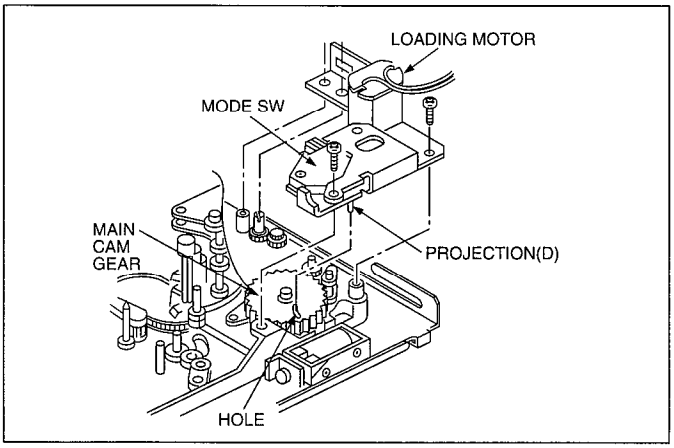

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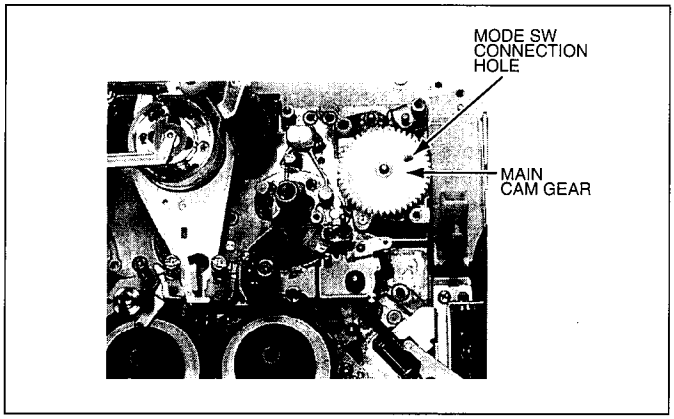

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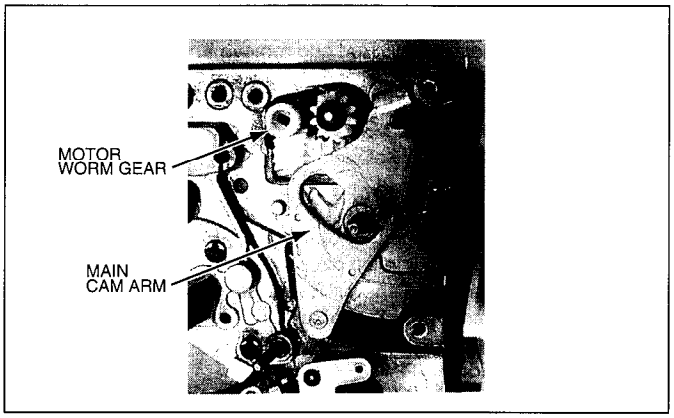

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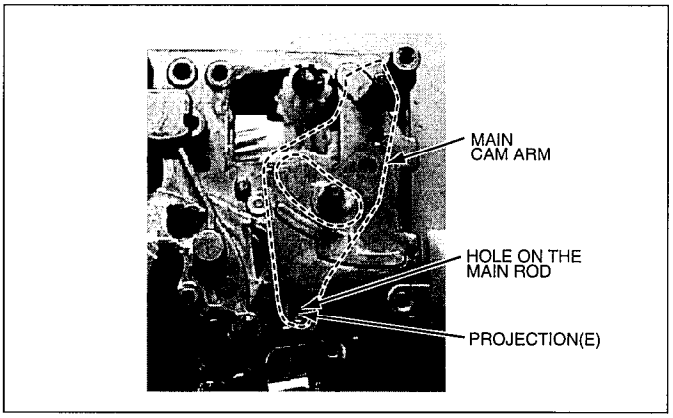


Fig. M-8

3-6. T1 Guide

Fig. M-9 Unscrew 2 screws (I) and remove the T1 Guide.

3-7. Cleaning Arm and T2 Arm

Fig. M-10 Unhook the Cleaning Spring.
Unlock the locking portion of the Cleaning Arm.
Remove the T2 Arm with Spring.

3-8. Cleaning Solenoid Base and Cleaning Solenoid

Fig. M-11 Unscrew 3 screws (J) and remove the Cleaning Solenoid Base.

Fig. M-12 Unscrew 2 screws (K) and remove the Cleaning Solenoid.

Note of installation

Fig. M-10 Adjust the Cleaning Solenoid Base so that the gap between the Cylinder and Cleaning Arm becomes 1.0mm +/- 0.1mm.
Confirm that the Cleaning Roller rotates when the Cleaning Solenoid is turned on in the play mode.

3-9. S-Post Base

Fig. M-13 Unscrew 1 screw (L) and remove the S-Post Base.

3-10. Main Rod

Fig. M-14 Slide the Main Rod and remove it.
When the Cleaning Solenoid Base is not removed;
Slightly shift the Cleaning Solenoid Base in direction and slide the Main Rod since the Main Rod is stopped by Cleaning Solenoid Base.

Note of installation

Fig. M-15 Install the Main Rod so that the each drive shaft meets the groove of the Main Rod. To lock the Main Rod, slide it in left direction.

3-11. T4 Sector Gear and Tension Regulator Arm

Fig. M-16 Remove the T4 Sector Gear and Tension Regulator Arm.

Note of installation

Fig. M-17 Install the T4 Sector Gear so that the alignment hole of the T4 Sector Gear is aligned to the alignment gear of the T4 Arm.

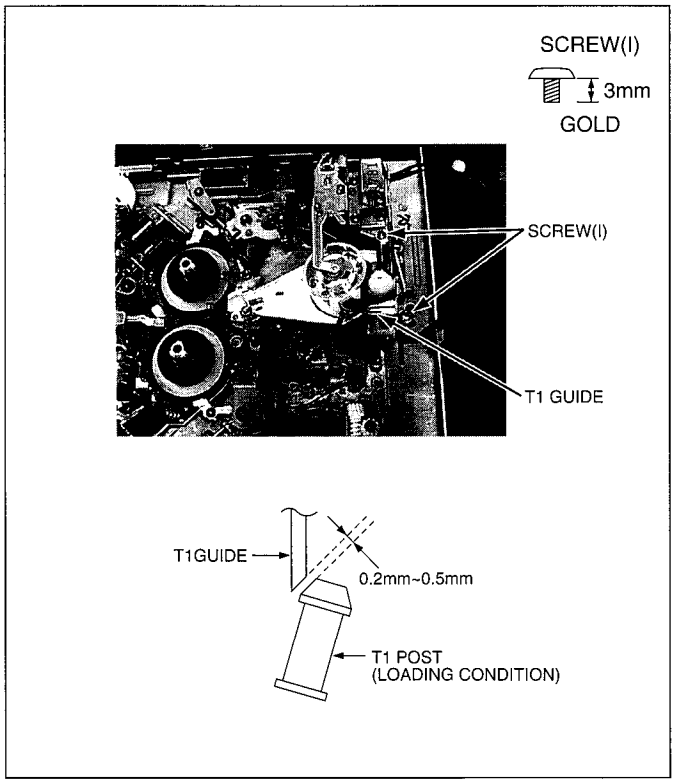
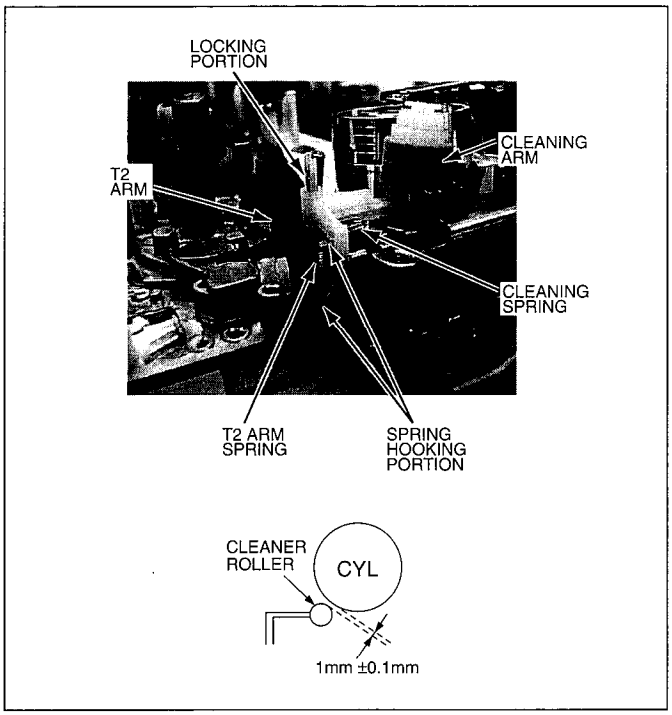


Fig. M-9



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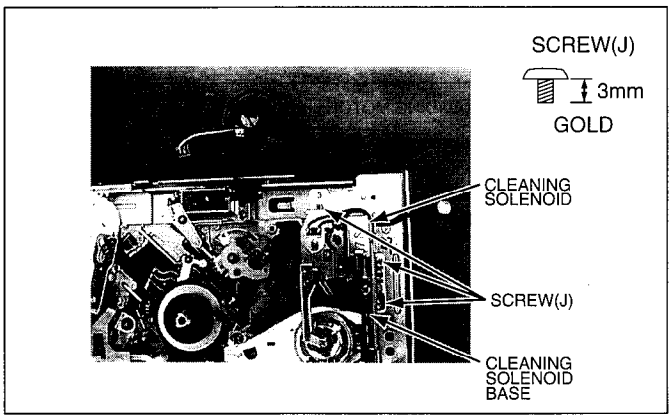


Fig. M-11

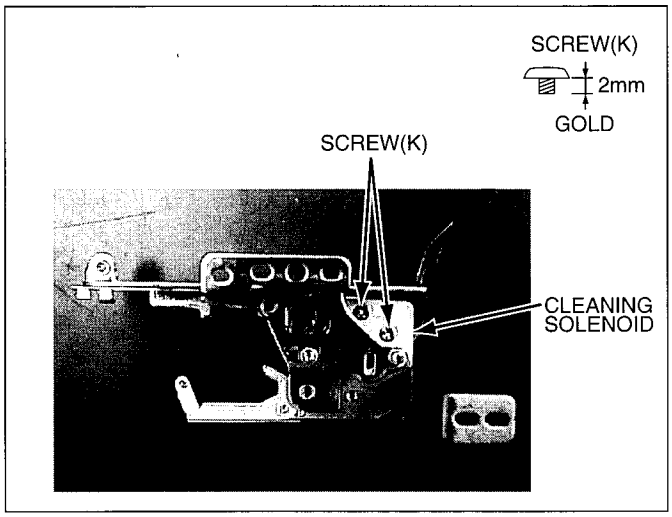


Fig. M-12

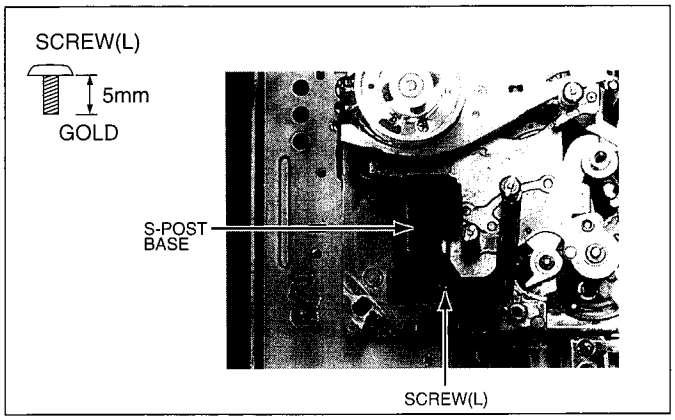


Fig. M-13

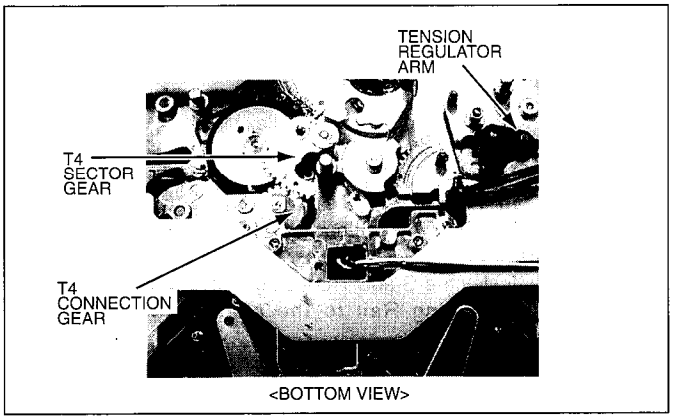
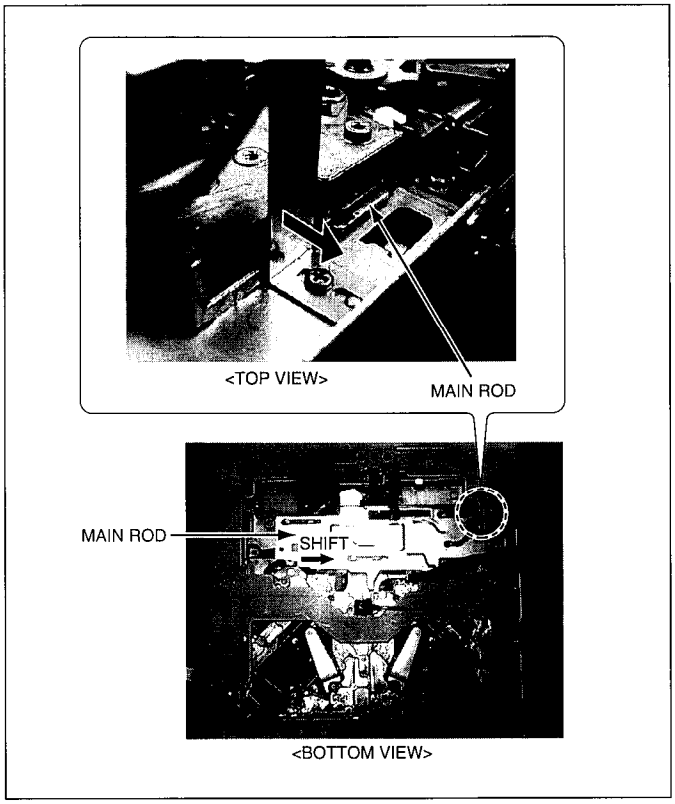


Fig. M-16



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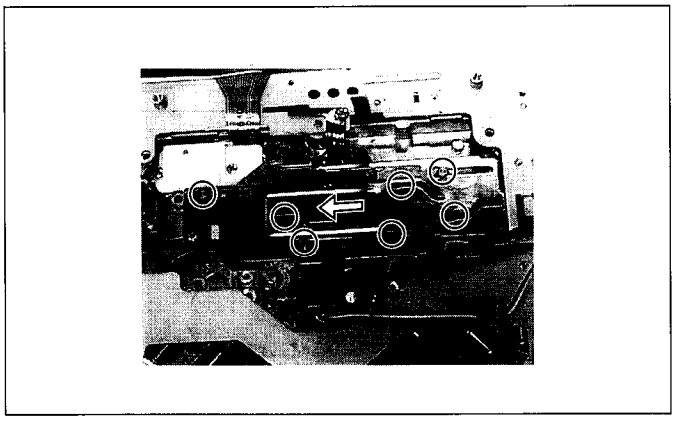

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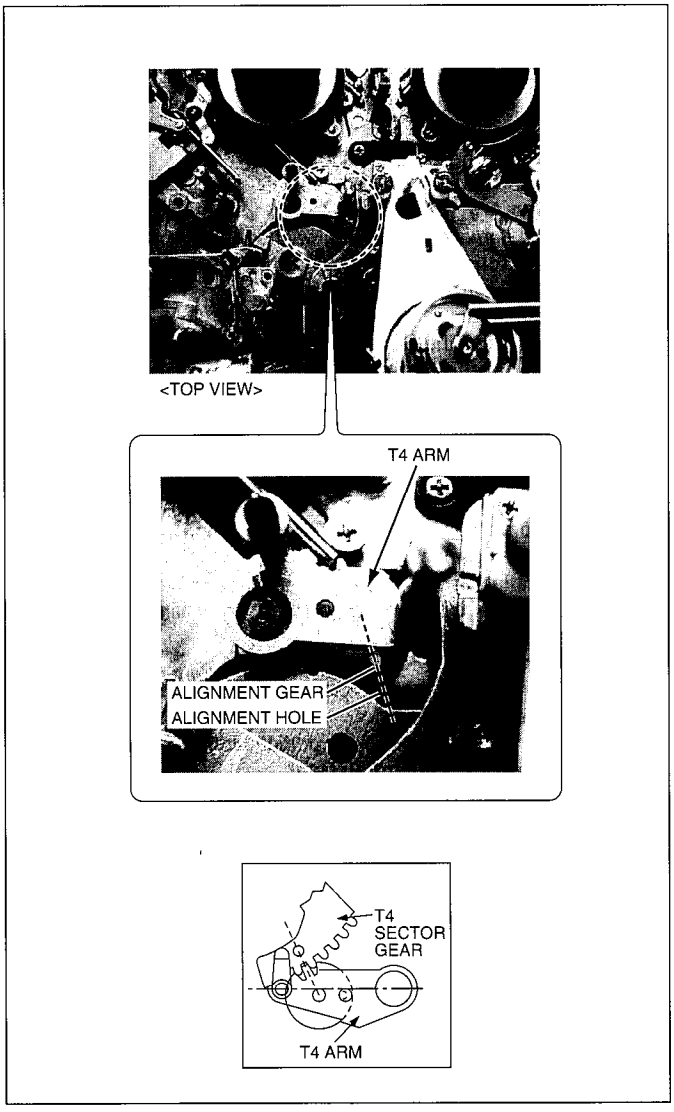


Fig. M-17

3-12. Cylinder Unit

Fig. M-18 Unscrew 4 screws (M) and (N). Then remove the Cylinder Unit carefully.

Fig. M-19 When removing or installing the Cylinder Unit, use extreme care so as not to damage the flexible cable.

3-13. Loading Rail

Fig. M-20 Unscrew 2 screws (O) and (P). Then slightly lift up the Loading Rail and slowly remove the S and T Loading Posts from the top side of the Loading Rail.

Note of installation

Fig. M-20 Install the S and T Loading Posts to the Loading Rail and set the Loading Rail to the chassis. Then install 2 screws (O) and (P).

3-14. T Loading Arm (Post)

Fig. M-21 Remove the E-Ring, washer and T Loading Arm.

When replacing the T Loading Arm, perform the "Mechanical Adjustment Procedures".

Note of installation

Fig. M-21 Install the T Loading Arm so that the hole on the gear of the T Loading Arm is aligned to the hole on the T Sector Gear.

3-15. Tension Arm

Fig. M-22 Remove the cut washer and unhook the spring, then remove the Tension Arm.

When replacing the Tension Arm, perform the "Mechanical Adjustment Procedures".

3-16. S Loading Arm (Post)

Fig. M-23 Remove the E-Ring, washer and S Loading Arm.

When replacing the S Loading Arm, perform the "Mechnical Adjustment Procedures".

Note of installation

Fig. M-23 Install the S Loading Arm so that the hole on the gear of the S Loading Arm is aligned to the hole on the S Sector Gear.

3-17. Tension Regulator Hook and Tension Sensor

Fig. M-24 Unscrew 1 screw (Q) located under the S Brake Solenoid, washer and Tension Sensor.

Remove the cut washer and Tension Regulator Hook.

When replacing the Tension Sensor, perform the "Mechanical Adjustment Procedures".

Note of installation

Fig. M-25 After installed Tension Sensor, confirm the position of the Tension Sensor cable.

3-18. Pinch Arm

Fig. M-26 Remove the cut washer and Pinch Arm with spring.

Note of installation

Fig. M-26 Confirm the hooking portion of the spring.

3-19. T4 Arm and T4 Connection Gear

Fig. M-27 Remove the Nylon Nut using tweezers or box driver (2.5mm).

Remove the washer, spring and T4 Arm.

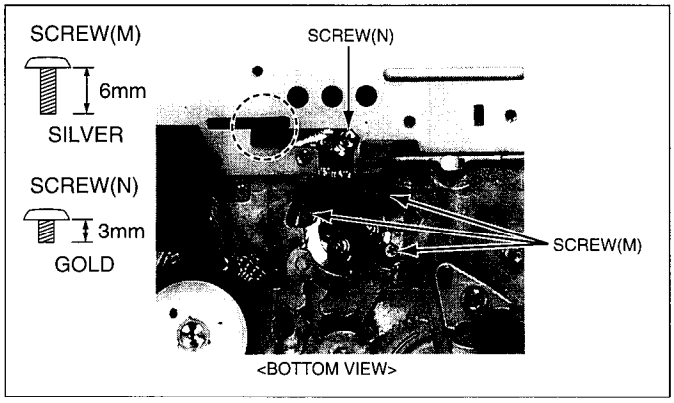


Fig. M-18

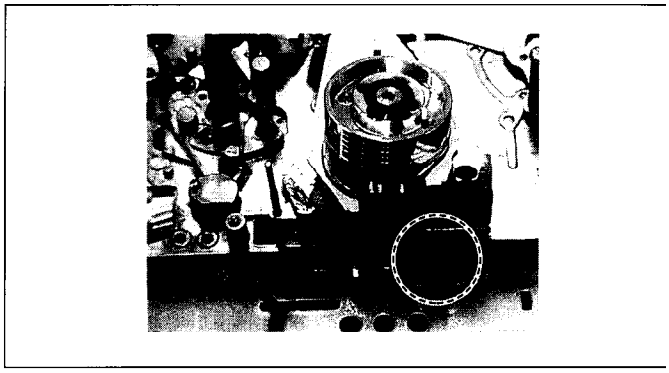
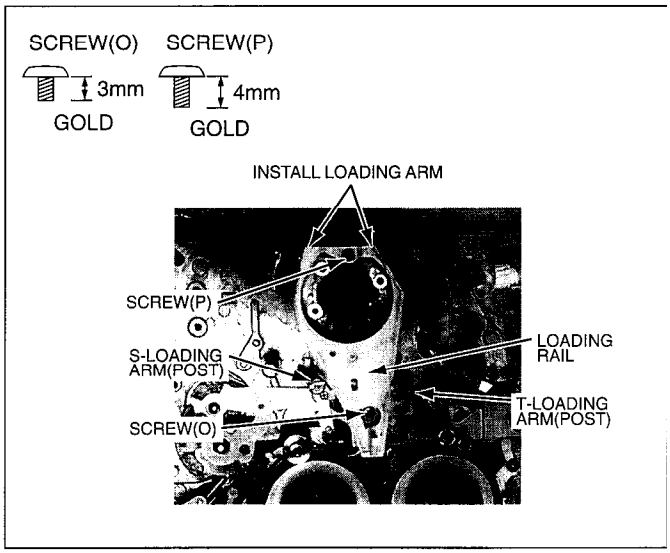


Fig. M-19



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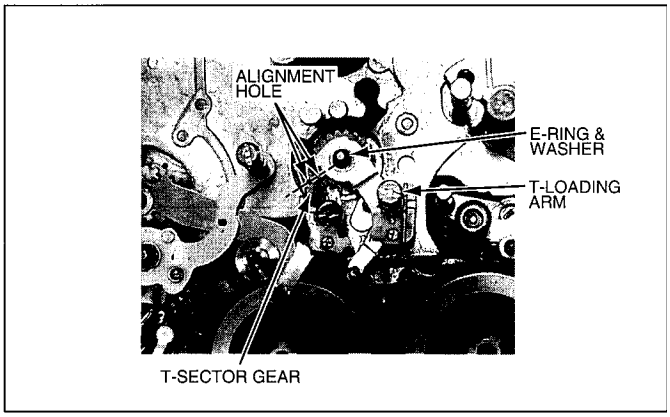

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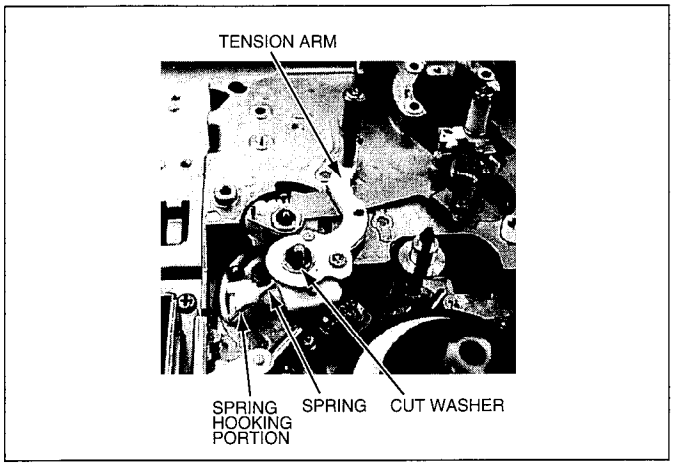

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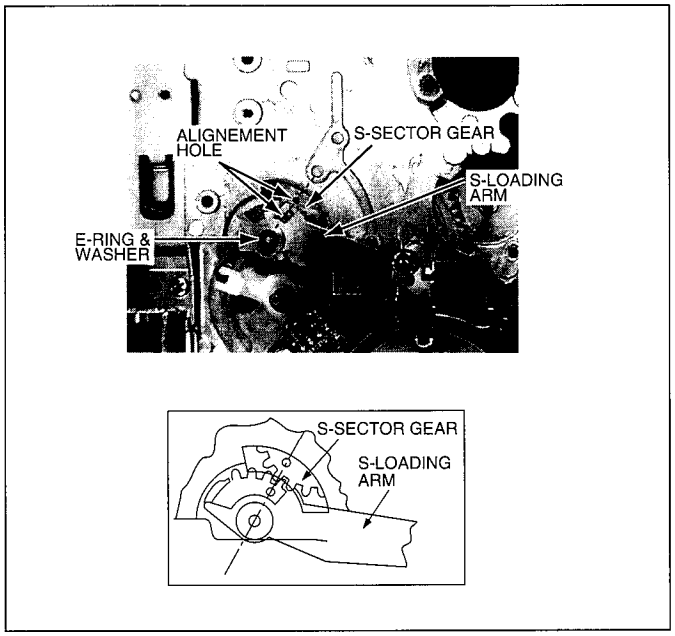

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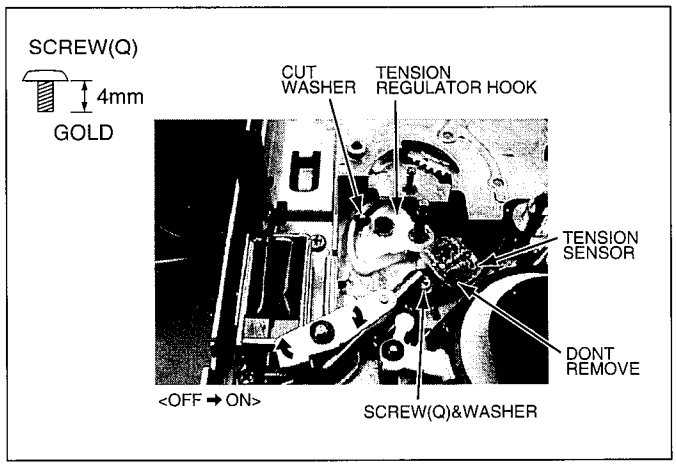


Fig. M-24

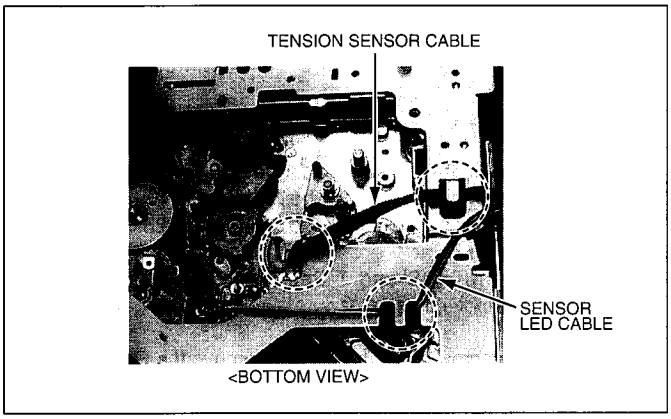


Fig. M-25

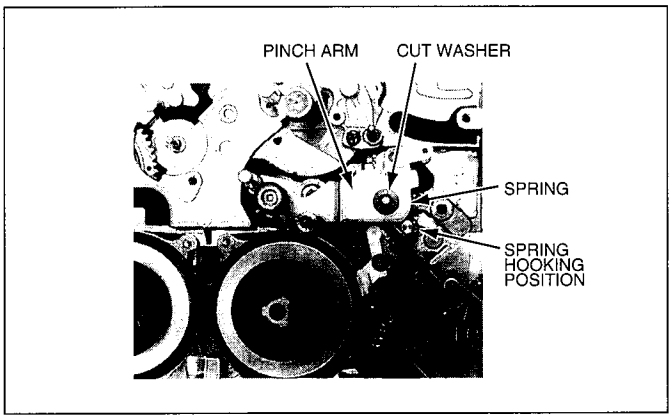


Fig. M-26

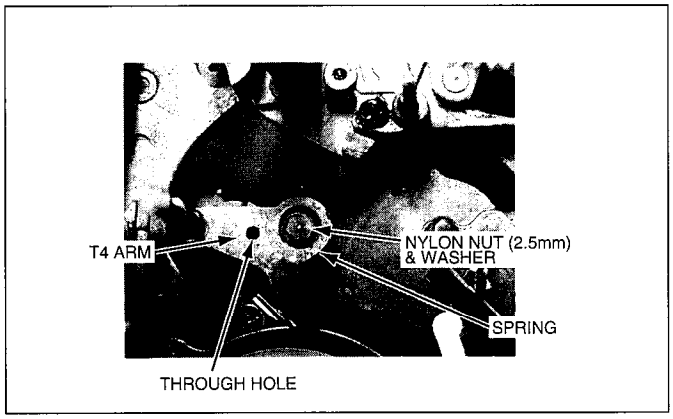


Fig. M-27

Fig. M-28 Remove the cut washer and T4 Connection Gear. When replacing the T4 Arm and/or T4 Connection Gear,perform the " Mechanical Adjustment Procedures" .

Note of installation

Fig. M-28 Install the T4 Connection Gear and cut washer.

Fig. M-27 Install the T4 Arm so that the through hole on the T4 Arm is aligned to the alignment hole on the T4 Connection Gear as shown in Fig. M-28.

3-20. S and T Sector Gear

Fig. M-29 Turn the S and T Sector Gears to clockwise and remove these Gears.

3-21. Gear Holder

Fig. M-30 Unscrew 2 screws (R) and remove the Gear Holder.

Note of installation

Fig. M-30 When installing the Gear Holder, confirm the position of the flexible cable of the Capstan Motor.

3-22. S-Brake Solenoid

Fig. M-31 Unscrew 2 screws (S). When removing the S-Brake Solenoid, the Tray Connection Rod must be removed because of the connector of the Solenoid is located between the Chassis and Tray Connection Rod.

Note of installation

Fig. M33 Adjust the S-Brake Solenoid so that the gap between theS-Brake and S-Reel Table becomes 0.2 to 0.5 mm (just release).

3-23. T-Brake Solenoid

Fig. M-32 Unscrew 2 screws (T) and remove the T-Brake Solenoid.

Note of installation

Fig. M33 Adjust the T-Brake Solenoid so that the gap between the T-Brake and T-Reel Table becomes 0.2 to 0.5 mm (just release).

3-24. Tape Beginning Sensor (T Sensor)

Fig. M-34 Unlock the locking portion and remove the Tape Beginning Sensor.

3-25. Tape End Sensor (S Sensor)

Fig. M-35 Unlock the locking portion and remove the Tape End Sensor.

3-26. MIC Stopper

Fig. M-36 Unscrew 2 screws (U) and remove the MIC Stopper.

3-27. MIC Connector Unit

Fig. M-37 Unscrew 1 screw (V) and remove the cut washer and MIC Connector Unit.

Note of installation

Fig. M-37 Install the MIC Connector Unit so that the projection (F) meets the hole on the MIC Connector Unit.

3-28. T Reel Table

Fig. M-38 Unscrew 4 screws (W) and remove the T Reel Table with 2 shifts.

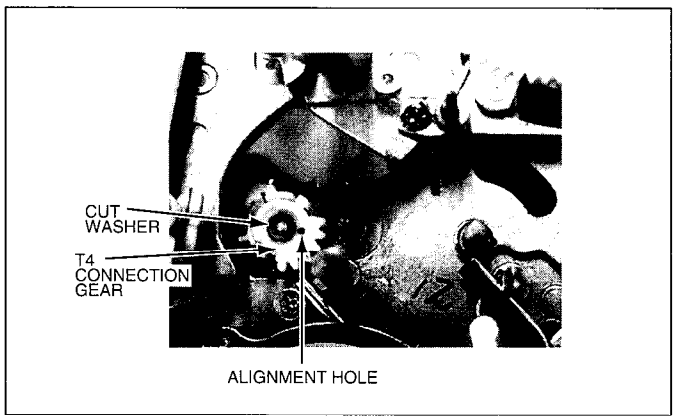


Fig. M-28

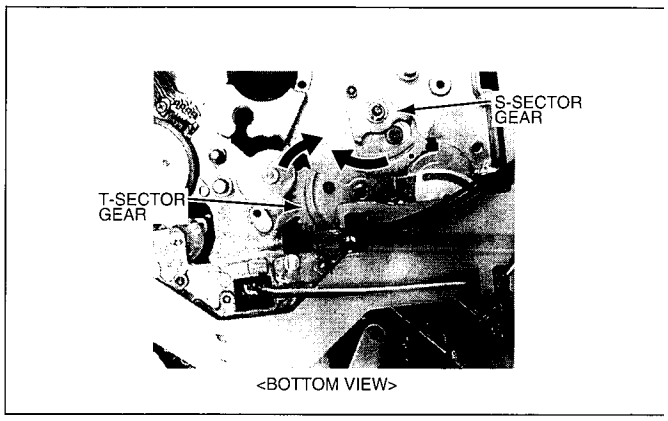


Fig. M-29

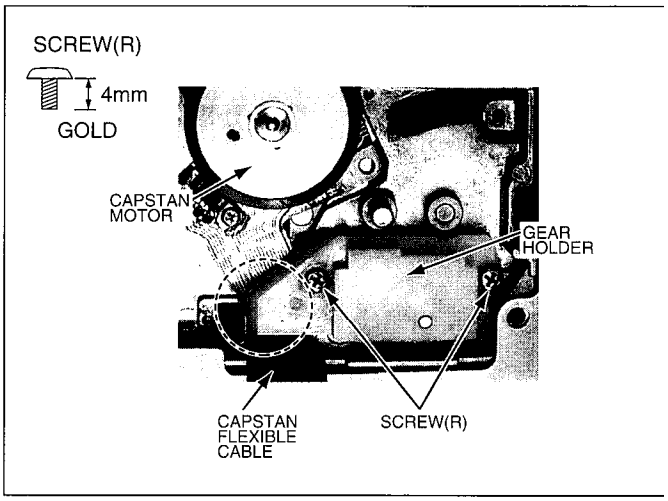


Fig. M-30

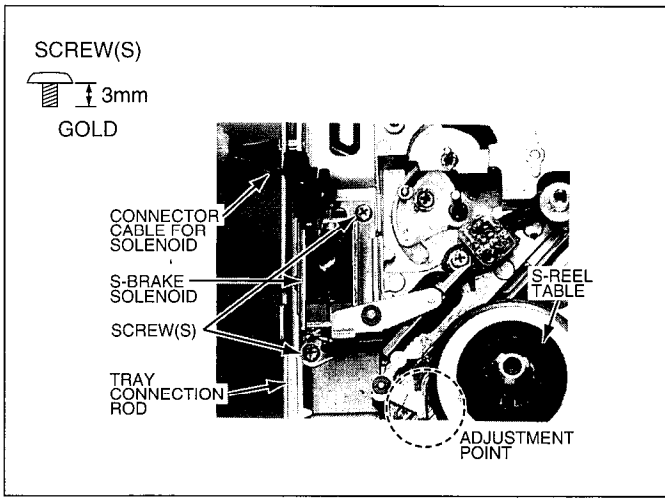


Fig. M-31

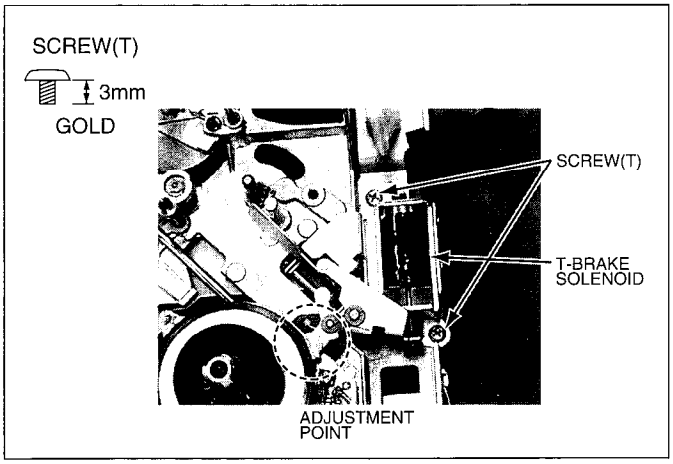


Fig. M-32

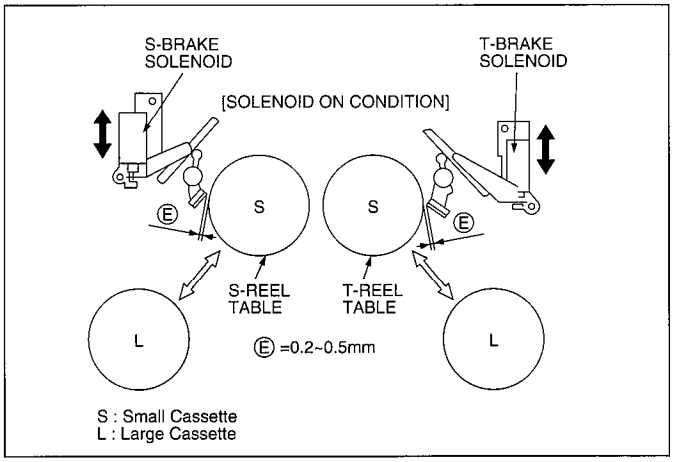


Fig. M-33

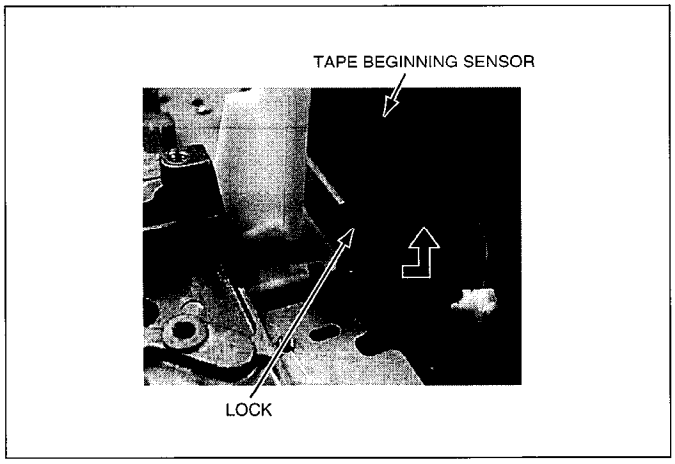


Fig. M-34

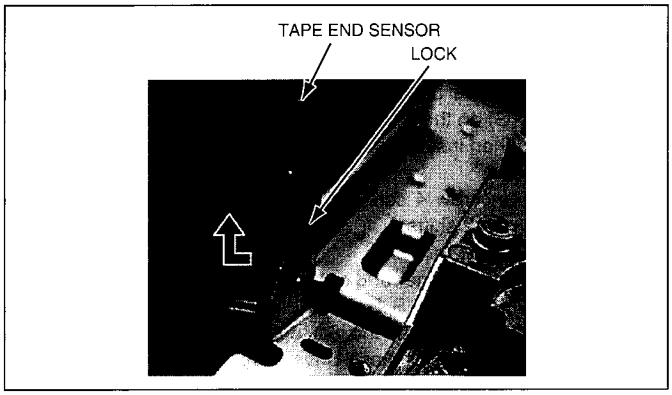


Fig. M-35

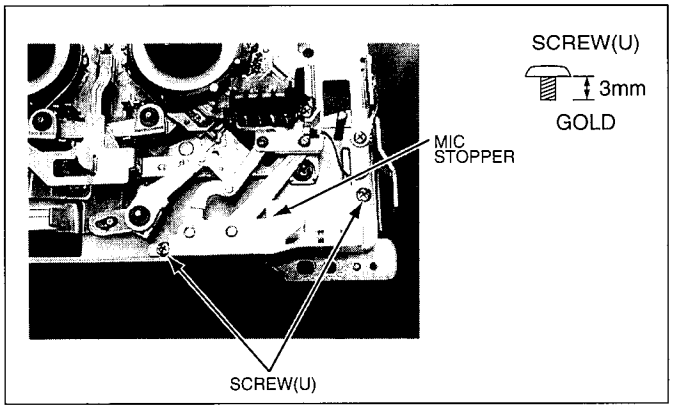


Fig. M-36

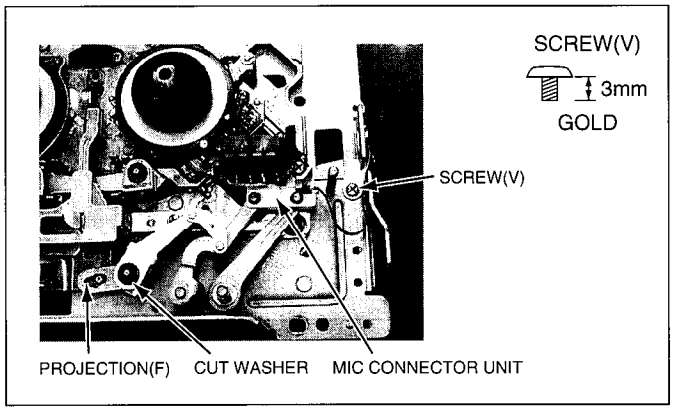


Fig. M-37

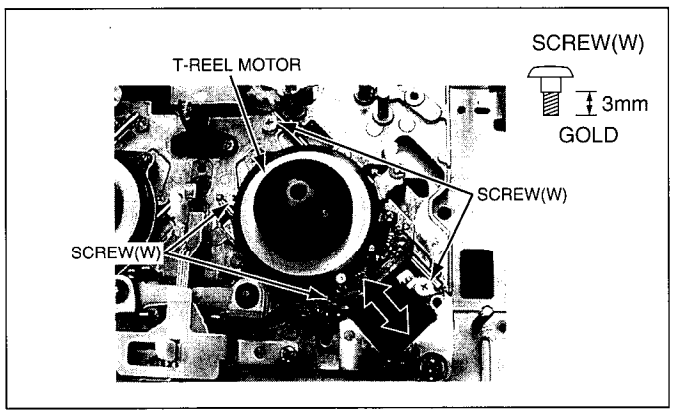


Fig. M-38

Note of installation

Fig. M-40 Set the inner and outer shafts to the T Reel Table.

Fig. M-41/42 Install the T Reel Table with 2 shafts so that the groove under the T Reel Table meets the projection (G) on the T Base Drive Arm.
Then install 4 screws (W).

3-29. S Reel Table

Fig. M-39 Unscrew 4 screws (X) and remove the S Reel Table with 2 shifts.

Note of installation

Fig. M-40 Set the inner and outer shafts to the S Reel Table.

Fig. M-41/42 Install the S Reel Table with 2 shafts so that the groove under the S Reel Table meets the projection (G) on the S Base Drive Arm.
Then install 4 screws (X).

3-30. Reel Release Angle

Fig. M-42 Unscrew 2 screws (Y) and remove the Reel Release Angle.

3-31. S and T Base Drive Arm

Fig. M-43 Remove the cut washer, S and T Base Drive Arms.

Note of installation

Fig. M-43 Install the S and T Base Arms so that the projections (H) on the S and T Base Arms meet the groove on the Slide Rod.

3-32. Communication Arm

Fig. M-44 Remove the cut washer and Communication Arm.

3-33. Tray Connection Rod and Lock Gear

Fig. M-45 Pull the Tray Connection Rod in front direction to release the lock and remove it.
Remove the Lock Gear.

Note of installation

Fig. M-46 Install the Tray Connection Rod.
Then install the Lock Gear so that the hole on the Lock Gear is aligned to the hole on the Tray Connection Rod.

3-34. Slide Rod

Fig. M-47 Remove the cut washer and Slide Rod.

3-35. Sensor LED

Fig. M-48 Unscrew 1 screw (Z) and Sensor LED.

Note of installation

Fig. M-25 After installed Sensor LED, confirm the position of the Sensor LED cable.

3-36. Capstan Motor

Fig. M-49 Unscrew 3 screws (a) and Capstan Motor.

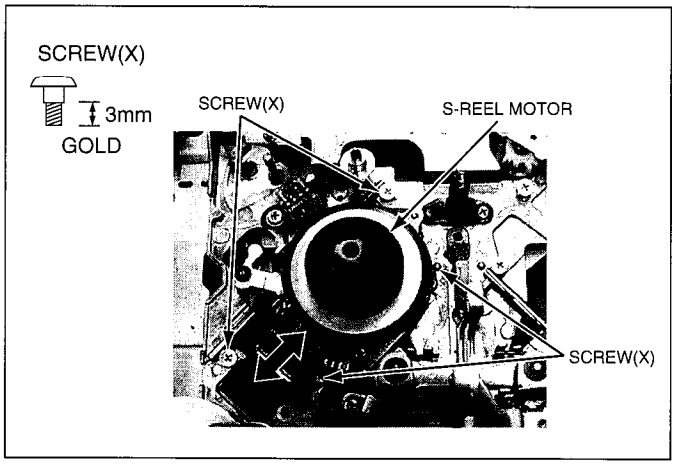


Fig. M-39

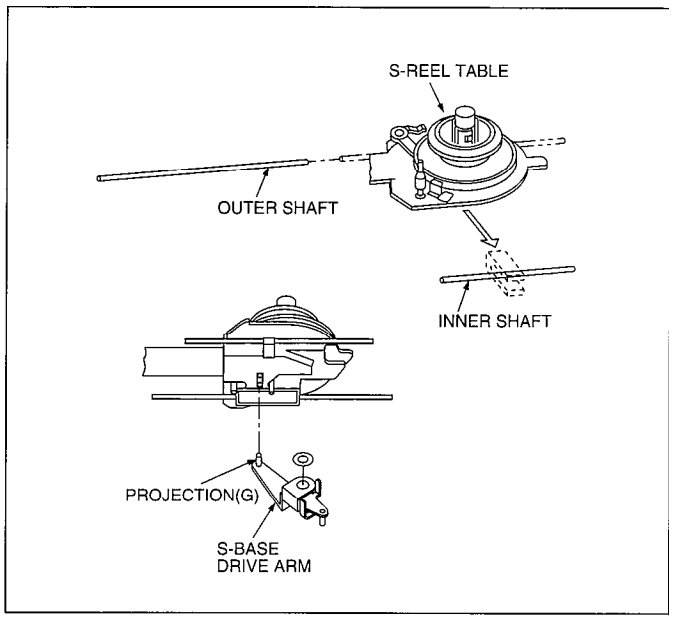


Fig. M-40

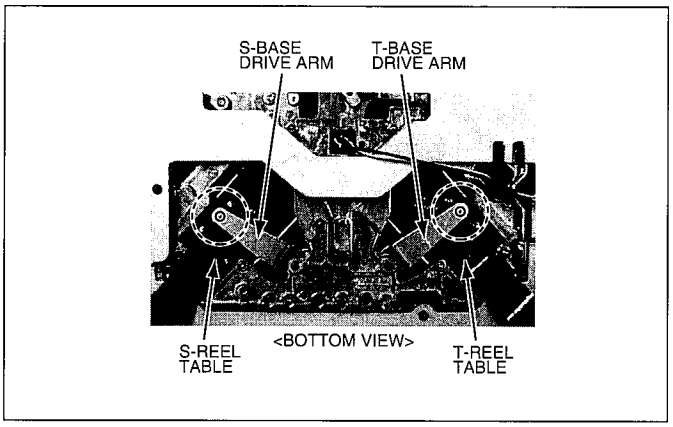


Fig. M-41

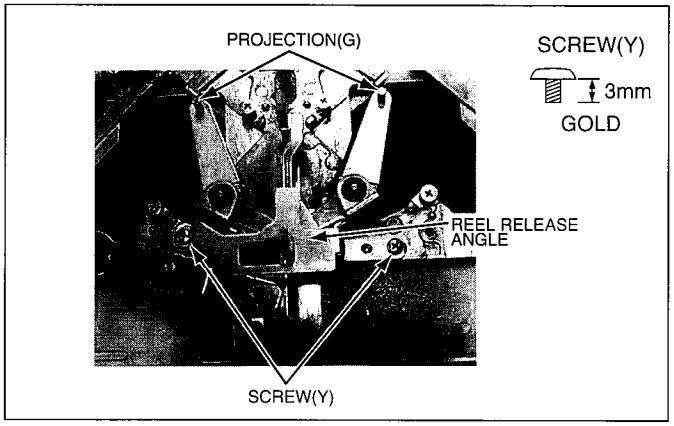


Fig. M-42

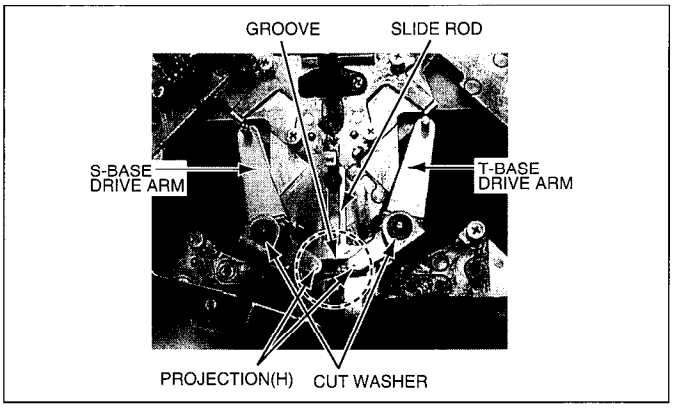


Fig. M-43

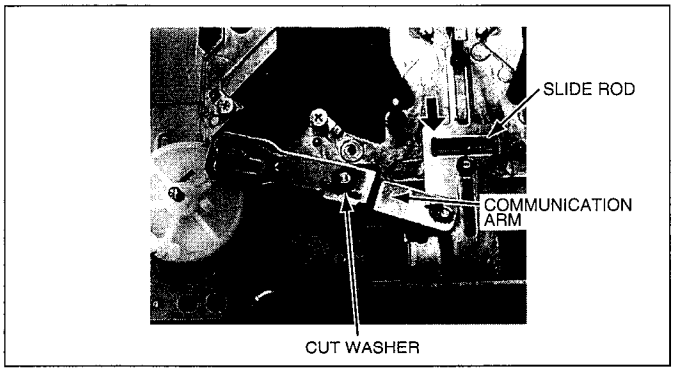


Fig. M-44

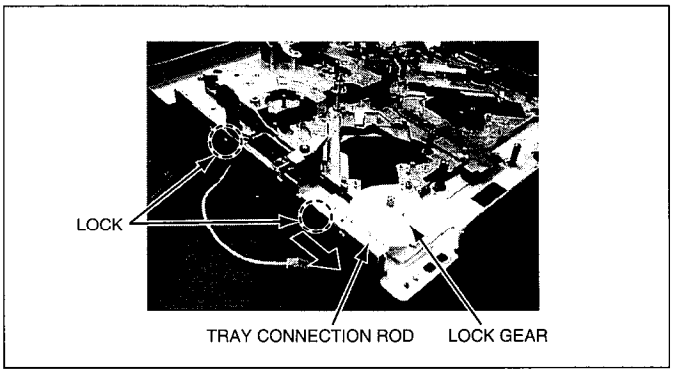


Fig. M-45

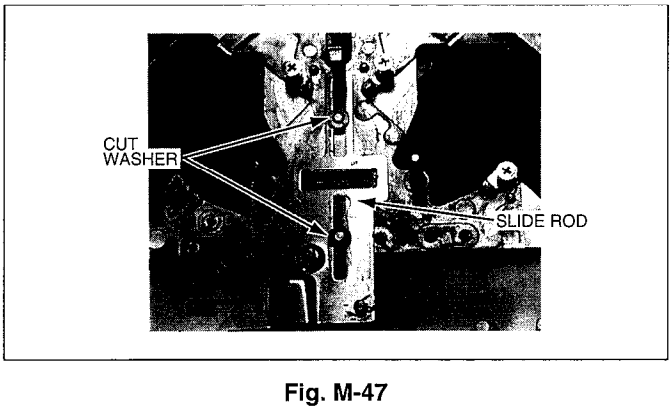


Fig. M-47

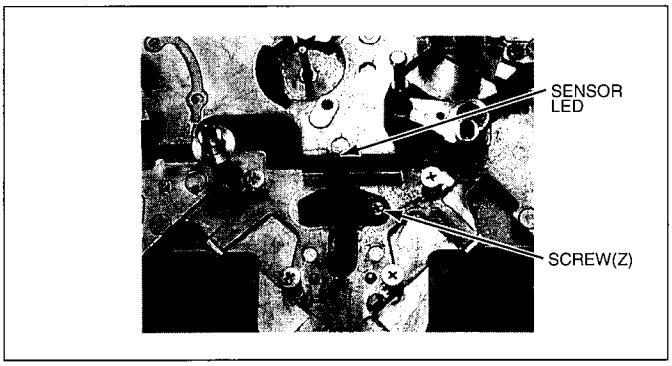


Fig. M-48

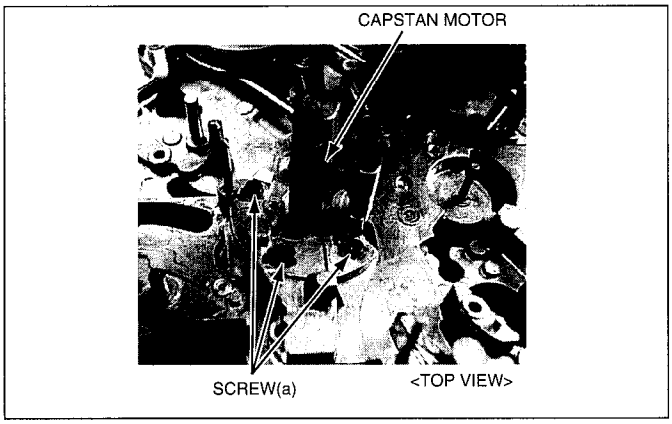


Fig. M-49

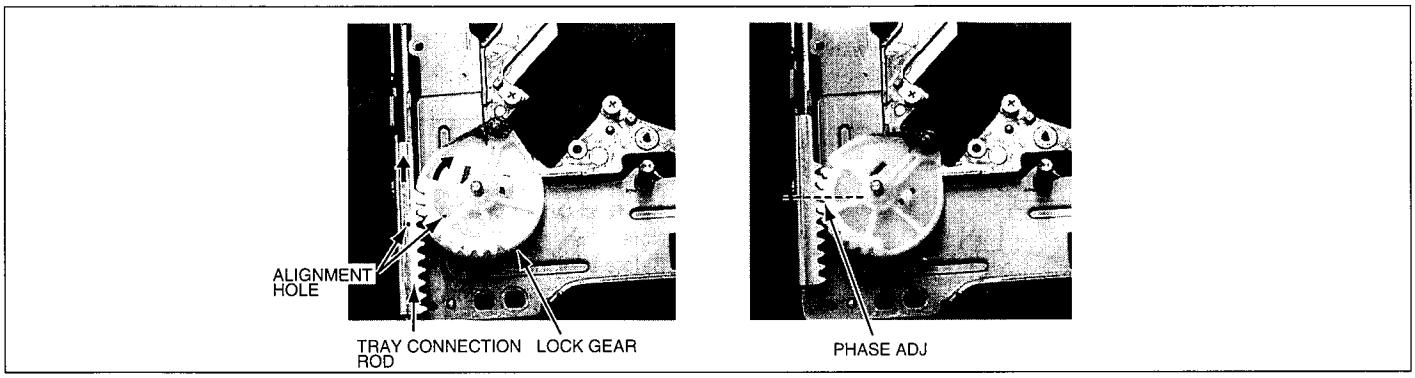


Fig. M-46

4. Mechanical adjustment
4-1. Name of Tape Transportation

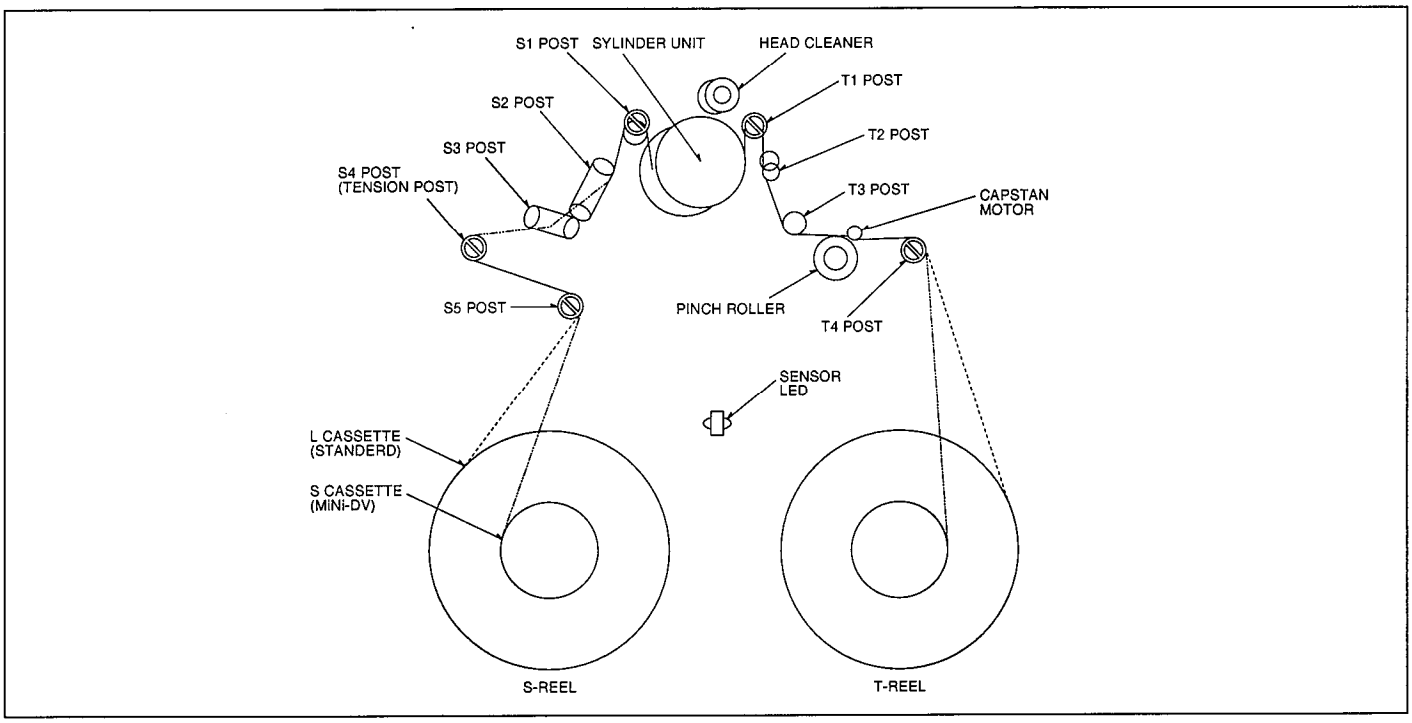


Fig. M-1

4-2. Cleaning Procedures

Make sure the power is off before cleaning. Use ethanol (more than 99% purity) as cleaning liquid.

4-2-1. Cleaning of Video Head

Clean heads by applying even pressure and rotating cylinder a few times. Never wipe in up and down motion. Never touch a cylinder by naked hand. First wipe with a cloth soaked by cleaning liquid. Then wipe with dry cloth.

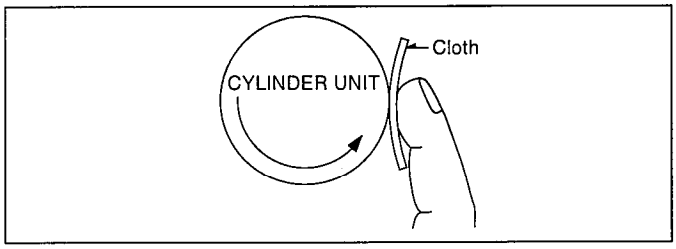


Fig. M-2

4-2-2. Cleaning of Drum Lead

Be careful not to touch a head chip. Clean the drum lead with a pick.

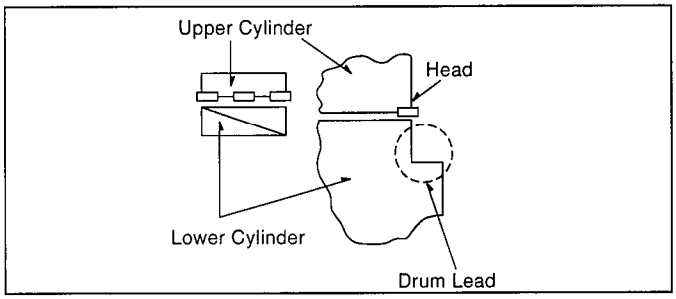


Fig. M-3

4-2-3. Cleaning of Pinch Roller and Capstan

Wipe the Pinch Roller and Capstan with a cloth soaked by cleaning liquid.

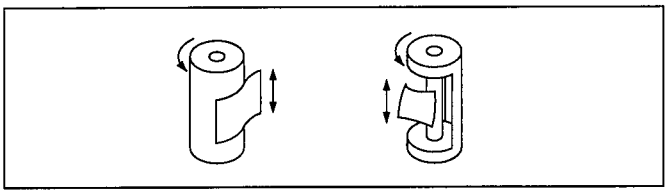


Fig. M-4

4-2-4. Cleaning of each Post

Wind a cloth on a pick. Wipe each post dry with that pick. Wipe again with a dry cloth. For metal posts wipe with cleaning liquid. Then wipe dry again.

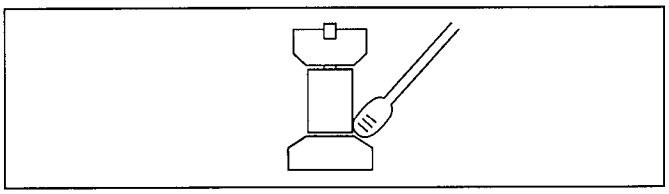


Fig. M-5

4-3. Reel Offset and Tension Arm Adjustment

Note:

Before beginning adjustment from the item 4-4., the "Reel Offset" and "Tension Arm Adjustment" described on the "5. Electrical Adjustment" must be done as shown in Fig. E-1.

4-4. T4, S4 and S5 Post Height Pre-Adjustment

Note :

Before this adjustment, the Servo Adjustment must be done.
(Refer to "5. Electrical Adjustment".)

1. Confirm the Reel Table is located at L (Standard) cassette position. If it is located at S (Mini-DV) cassette position, turn power on and insert L cassette and eject the L cassette.
2. Turn power off. Remove the Front Loading Unit. Then place the Mech. Plate (VFK1348A) on the Reel Table.
3. Place the Post Height Adj. Tool (VFK1450) on the Mech. Plate as shown in Fig. M-6 and adjust the T4 post height by using the Box Driver (VFK1151).
4. Adjust the S4 and S5 post height by using the Post Driver (VFK1278).
5. Then turn S4 and S5 posts 1 round counterclockwise from lower limit position.

T4 Post : Lower Limit (-0.5 +/- 0.05 mm)
S4 Post : Lower Limit (+0.2 +/- 0.05 mm)
S5 Post : Lower Limit (+0.2 +/- 0.05 mm)

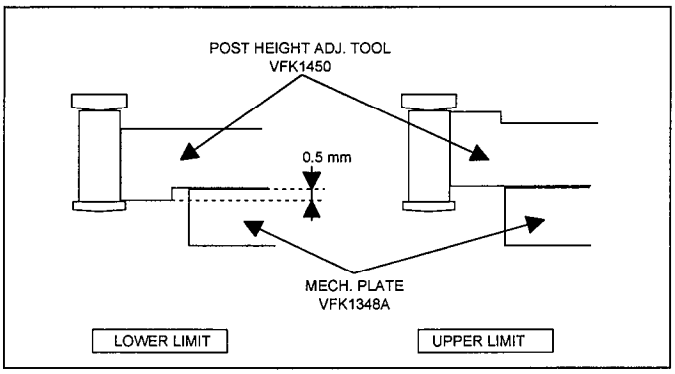


Fig. M-6

4-5. Tape Pass Adjustment Procedures

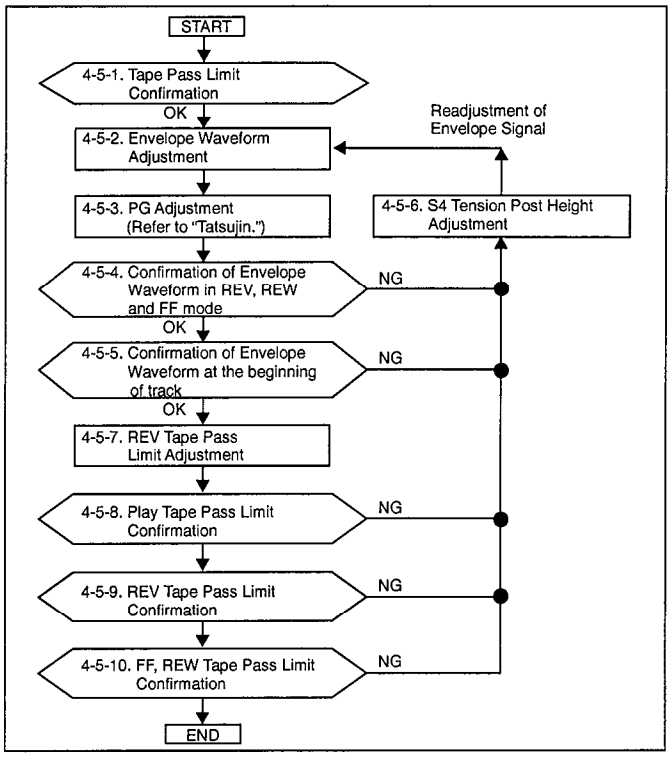


Fig. M-7

4-5-1. Tape Pass Limit Confirmation

1. Place unit into Play mode, and adjust the height of each post do not to occurred tape damage.
2. Regarding the S1 Post and T1 Post, refer to item "4-5-2. Envelope Waveform Adjustment".
3. Confirm the tape pass limit of each post as shown in Fig. M-8.

POST NAME	TAPE LIMIT							ADJUSTMENT PORTION	TAPE PASS LIMIT
	A	B	C	D	E	F	G		
4-5-1. Play Tape Pass Limit Confirmation									
S5 Post	×	×	○	○	×	×	×	S5 Post	Lower Limit
S4 (Tension) Post	×	×	×	○	×	×	×	S4 (Tension) Post	Lower Limit
S1 Post	×	○	×	×	×	×	×	S1 Post	Envelope Adjustment
T1 Post	×	○	×	×	×	×	×	T1 Post	Envelope Adjustment
T4 Post	×	×	○	×	×	×	×	T4 Post Arm Nut	Free Limit
4-5-7. REV Tape Pass Limit Adjustment									
S5 Post	×	○	○	○	×	×	×	S5 Post	Lower Limit
S4 (Tension) Post	×	×	○	○	×	×	×	S4 (Tension) Post	Lower Limit
S1 Post	×	○	×	×	×	×	×	S1 Post	Envelope Adjustment
T1 Post	×	○	○	○	×	×	×	T1 Post	Envelope Adjustment
T4 Post	×	×	○	×	×	×	×	T4 Post Arm Nut	Free Limit
4-5-8. Play Tape Pass Limit Confirmation									
S5 Post	×	×	○	○	×	×	×	S5 Post	Lower Limit
S4 (Tension) Post	×	×	×	○	×	×	×	S4 (Tension) Post	Lower Limit
S1 Post	×	○	×	×	×	×	×	S1 Post	Envelope Adjustment
T1 Post	×	○	×	×	×	×	×	T1 Post	Envelope Adjustment
T4 Post	×	×	×	○	×	×	×	T4 Post Arm Nut	Free Limit
4-5-9. REV Tape Pass Limit Confirmation									
S5 Post	×	○	○	○	×	×	×	S5 Post	Lower Limit
S4 (Tension) Post	×	○	○	○	×	×	×	S4 (Tension) Post	Lower Limit
S1 Post	×	○	×	×	×	×	×	S1 Post	Envelope Adjustment
T1 Post	×	○	○	○	×	×	×	T1 Post	Envelope Adjustment
T4 Post	×	○	○	○	×	×	×	T4 Post Arm Nut	Free Limit
4-5-10. FF / REW Tape Pass Limit Confirmation									
S5 Post	×	○	○	○	×	×	×	S5 Post	Lower Limit
S4 (Tension) Post	×	×	○	○	×	×	×	S4 (Tension) Post	Lower Limit
S1 Post	×	○	×	×	×	×	×	S1 Post	Envelope Adjustment
T1 Post	×	○	○	○	×	×	×	T1 Post	Envelope Adjustment
T4 Post	×	○	○	○	×	×	×	T4 Post Arm Nut	Free Limit

○ : means acceptable

× : means not acceptable

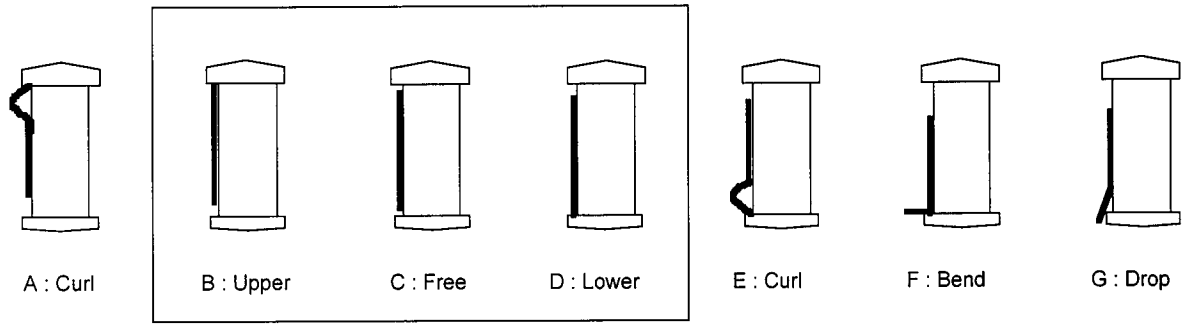


Fig. M-8

4-5-2. Envelope Waveform Adjustment

<Pre-Adjustment>

1. Hook up the PC EVR System as shown in Fig. 2-7 (Section 1). Then starts the RF / VITERBI Adjustment in the Video Section.
2. Connect the oscilloscope to "Envelope" and "GND" on the Measuring TP Board (VFK1409). Then playback the Alignment Tape (VFM3110EDS) and adjust S1 and T1 posts so that the envelope output is within following specification (Fig. M-9).
   Use "HID1" as a trigger.
   When the S1 and T1 posts are adjusted, first raise the post height and make small the entrance and exit side of the envelope, then down the post until envelope becomes flat.
3. Adjust T1 post and makes exit side of the envelope flat then adjust S1 post.

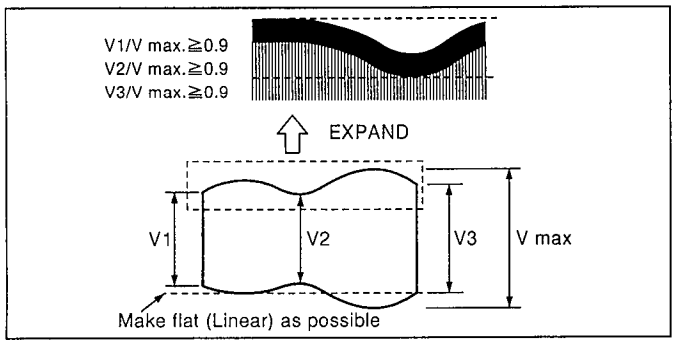


Fig. M-9

<Fine Adjustment>

1. Playback the self recorded tape and readjust S1 and T1 posts so that the BER counter number becomes the minimum.
2. After adjustment, unload the tape then loading the tape. Then confirm the waveform style and BER counter number is minimized.

4-5-3. PG Adjustment

Since the adjustment procedure for "PG Adjustment" is supported only "PC EVR System", refer to "PC EVR" software.

4-5-4. Confirmation of Envelope Waveform in REV, REW and FF mode

1. Hook up the PC EVR System as shown in Fig. 2-7 (Section 1).
2. Connect the oscilloscope to "Envelope" and "GND" on the Measuring TP Board (VFK1409).
3. Confirm the Envelope Waveform signal is in the specification in the REV, REW and FF mode as shown in Fig. M-10.
4. If it is out of specification, after adjusting the "4-5-6. S4 Tension Post Height Adjustment", confirm this "Envelope Waveform in REV, REW and FF mode" again.

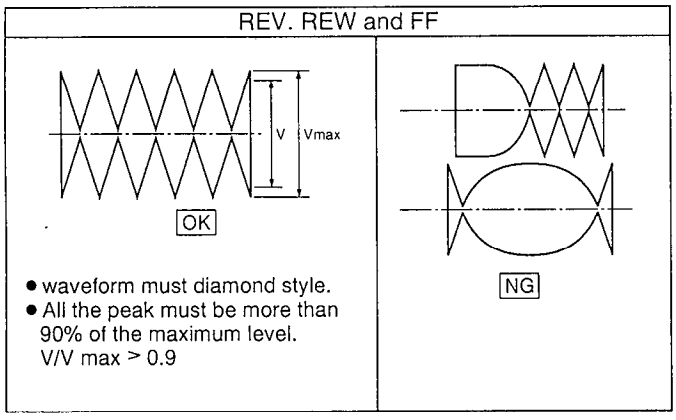


Fig. M-10

4-5-5. Confirmation of Envelope Waveform at the beginning of track

1. Observe the Envelope Waveform signal by oscilloscope and confirm the envelope signal is in the specification in the transition from FF to Play, from REW to Play, from REV to Play and from Loading completion to Play.
2. If it is out of specification, after adjusting the "4-5-6. S4 Tension Post Height Adjustment", confirm this "Envelope Waveform at beginning of track" again.

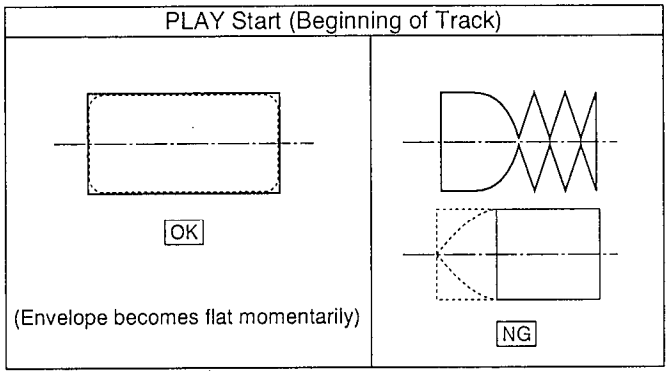


Fig. M-11

4-5-6. S4 Tension Post Height Adjustment

Note :
This adjustment should be done when the "4-5-2. Envelope Waveform Adj.", "4-5-4. Confirmation of Envelope in REV, REW and FF mode" or "4-5-5. Confirmation of Envelope Waveform at the beginning of Track" can not be achieved the specification.

1. Rotate the S4 Tension Post height 90 degrees counterclockwise from lower limit position.
2. Adjust S1 and T1 post height adjustment again. Refer to the "4-5-2. Envelope Waveform Adjustment".
3. Confirm the "Play Start Envelope Waveform". Refer to the "4-5-5. Confirmation of Envelope Waveform at the beginning of Track".
4. If it is not in the specification, repeat item 1 to 3. The maximum rotation angle is 360 degrees.
5. Even the height is still out of specification, confirm the "4-4. T4, S4 and S5 Post Height Pre-Adjustment".

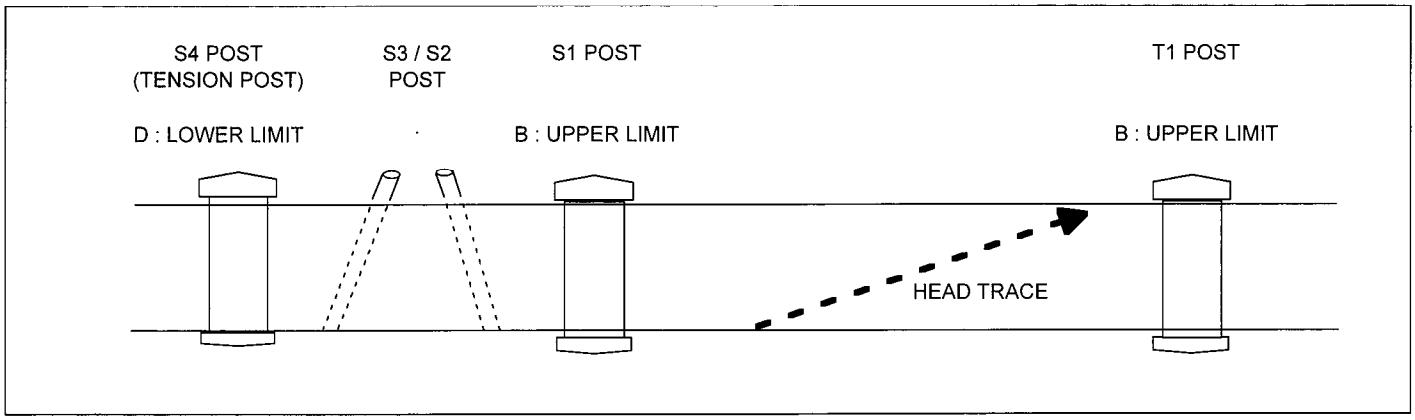


Fig. M-12

4-5-7. REV Tape Pass Limit Adjustment

1. Place unit into REV mode, and adjust T4 Post so that the lower limit touches the tape.
2. Confirm the tape pass limit of each post as shown in Fig. M-8.
3. This adjustment must be done after "4-5-2. Envelope Waveform Adjustment".

4-5-8. Play Tape Pass Limit Confirmation

1. Place the unit into Play mode, and confirm the each post limit is in the specification as shown in Fig. M-8.
2. This adjustment must be done after "4-5-2. Envelope Waveform Adjustment".
3. Regarding T4 Post, confirm and adjust this confirmation alternately with "4-5-9. REV Tape Pass Limit Confirmation".
4. Confirm the tape pass limit for both L and S cassettes.

4-5-9. REV Tape Pass Limit Confirmation

1. Place the unit into REV mode, and confirm the each post limit is in the specification as shown in Fig. M-8.
2. This adjustment must be done after "4-5-2. Envelope Waveform Adjustment".
3. This adjustment should be done alternately with "4-5-8. Play Tape Pass Limit Confirmation".
4. Confirm the tape pass limit for both L and S cassettes.

4-5-10. FF, REW Tape Pass Limit Confirmation

1. Place the unit into FF and REW mode, and confirm the each post limit is in the specification as shown in Fig. M-8.
2. This adjustment must be done after "4-5-2. Envelope Waveform Adjustment".
3. Confirm the tape pass limit for both L and S cassettes.

5. Electrical Adjustment

Since the "PG Shifter Adj." and Video adjustments except "EE Y Level Adj." are required the "PC EVR System", these adjustment procedures are described on "Tatsujin" software.

1. Servo Circuit

1-1. T and S Reel Offset Adj.

[Take up Reel Offset Adj.]

TP	ADJ	MODE	Jig & Tool
TP2701 (T ET) TP2702 (T GND)	VR2702 (T VR)	Cassette Down (Stop)	———
TAPE	M. EQ	SPEC.	
Mini DV	D.V.M.	0 +/- 1mV	

[T Reel Offset Adj.]

1. Set a cassette on the tray and make the cassette down condition.
2. Connect the Digital Volt Meter between TP2701 (T ET) and TP2702 (T GND).
3. Adjust VR2702 (T VR) so that the voltage becomes 0 +/- 1mV.

[Supply Reel Offset Adj.]

TP	ADJ	MODE	Jig & Tool
TP2703 (S ET) TP2704 (S GND)	VR2701 (S VR)	Cassette Down (Stop)	———
TAPE	M. EQ	SPEC.	
Mini DV	D.V.M.	0 +/- 1mV	

[S Reel Offset Adj.]

1. Set a cassette on the tray and make the cassette down condition.
2. Connect the Digital Volt Meter between TP2703 (S ET) and TP2704 (S GND).
3. Adjust VR2701 (S VR) so that the voltage becomes 0 +/- 1mV.

Tension Adjustment

When this adjustment is done, melt the grew of the adjustment screws as shown in Fig. E-6

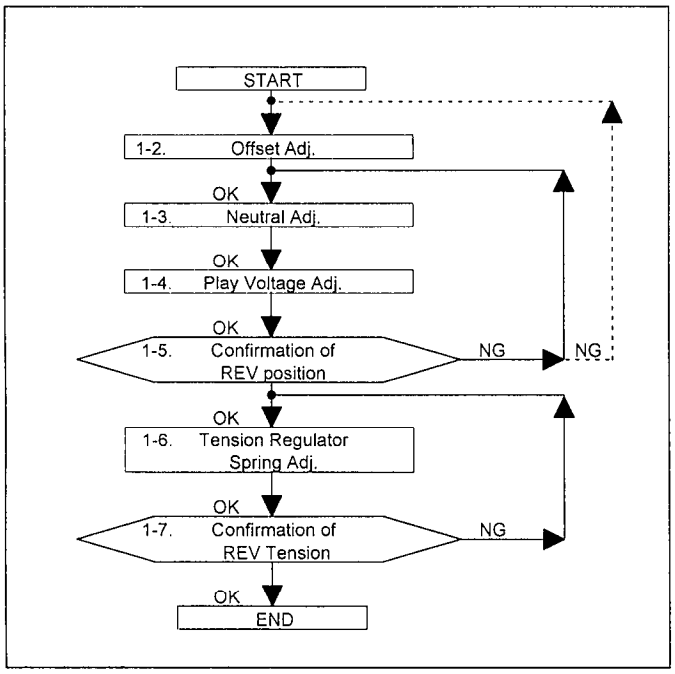


Fig. E-1

1-2.Tension Arm Offset Adj.

TP	ADJ	MODE	Jig & Tool
TP6502 (TP2) TP6503 (TP3)	VR6501 (TEN SET)	Cassette Down (Stop)	———
TAPE	M. EQ	SPEC.	
Mini DV	D.V.M.	0 +/- 0.03V	

1. Set a cassette on the tray and make the cassette down condition.
2. Connect the Digital Volt Meter between TP6502 (TP2) and TP6503 (TP3).
3. Adjust VR6501 (TEN SET) so that the voltage becomes 0 +/- 0.03V.

1-3. Tension Arm Neutral Adj.

TP	ADJ	MODE	Jig & Tool
TP6502 (TP2) TP6503 (TP3)	Tension Regulator Base	Loading Condition (Service Mode 7)	VFK1208 (Black with Hole)
TAPE	M. EQ	SPEC.	
———	D.V.M.	0 +/- 0.06V	

1. Remove the Tray Unit.
2. Set the VFK1208 to the Supply Post Base (A) as shown in Fig. E-2.
3. Place the unit into the no tape-loading mode by using Service Mode described as follows.
   1. Press the "FF" and "Eject" buttons simultaneously in eight times toset the Service Mode No. 7.
   2. Set the mechanism to loading condition by pressing the "Play" button.
      Play button : Loading direction
      Stop button : Unloading direction
4. Connect the Digital Volt Meter between TP6502 (TP2) and TP6503 (TP3).
5. Loosen screw (A).
6. Adjust the Tension Regulator Base so that the voltage becomes 0 +/- 0.06V by moving the (D) portion with tweezers that are not magnetized.
7. Then tighten the screw (A).

Caution

Don't touch the magnetized driver or tweezers to S-Reel FG magnet portion, when the "D" portion is adjusting.

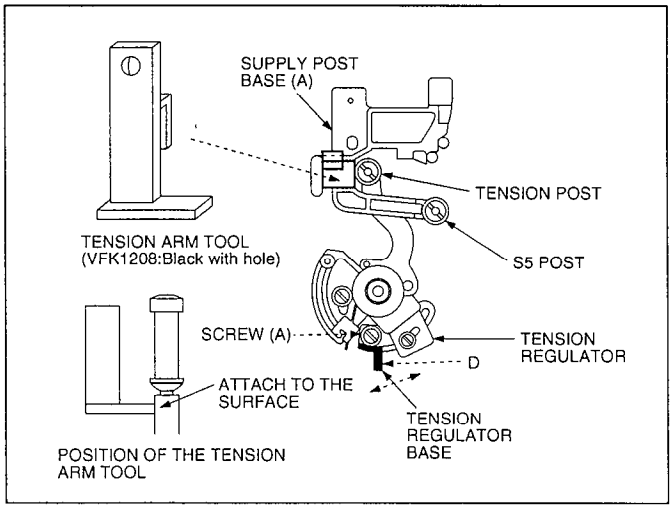


Fig. E-2

1-4. Tension Arm Play Voltage Adj.

TP	ADJ	MODE	Jig & Tool
TP6502 (TP2) TP6503 (TP3)	VR6502 (TEN GAIN)	Loading Condition (Service Mode 7)	VFK1156 (Black)
TAPE	M. EQ	SPEC.	
———	D.V.M.	0.92 +/- 0.03V	

1. Remove the Tray Unit.
2. Set the VFK1156 to the Supply Post Base (A) as shown in Fig. E-3.
3. Place the unit into the no tape-loading mode by using Service Mode.
4. Connect the Digital Volt Meter between TP6502 (TP2) and TP6503 (TP3).
5. Adjust the VR6502 (TEN GAIN) so that the voltage becomes 0.92 +/- 0.03V.

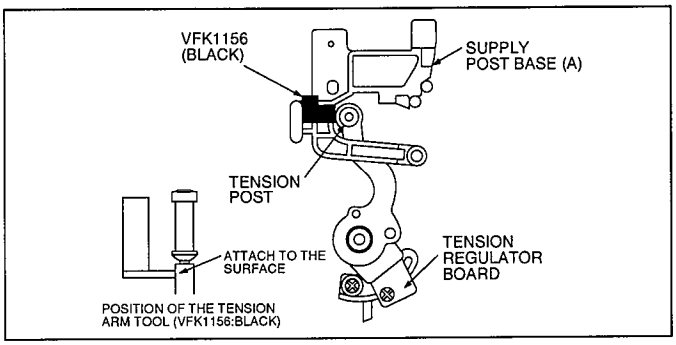


Fig. E-3

1-5. Confirmation of REV position of the Tension Arm

TP	ADJ	MODE	Jig & Tool
TP6502 (TP2) TP6503 (TP3)	———	Loading Condition (Service Mode 7)	VFK1155 (White)
TAPE	M. EQ	SPEC.	
———	D.V.M.	-0.92 +/- 0.2V	

1. Remove the Tray Unit.
2. Set the VFK1155 to the Supply Post Base (A) as shown in Fig. E-4.
3. Place the unit into the no tape loading mode by using Service Mode.
4. Connect the Digital Volt Meter between TP6502 (TP2) and TP6503 (TP3).
5. Confirm the voltage is in the specification.
6. If it is out of specification, readjust "1-3. Tension Arm Neutral Adj."and "1-4. Tension Arm Play Voltage Adj.".
7. If it is still out of specification, replace the Tension Post unit and readjust the Tension Arm Adjustment from "1-2. Tension Arm Offset Adj.".

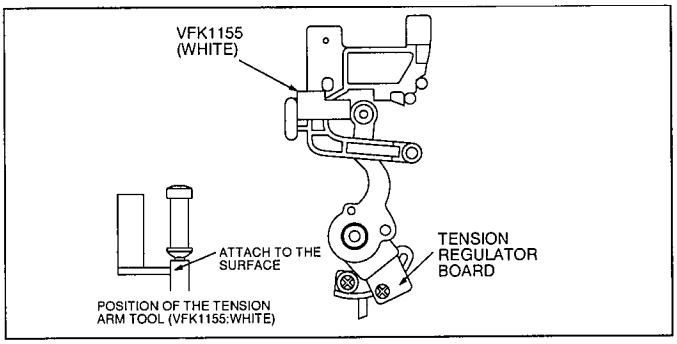


Fig. E-4

1-6. Tension Regulator Spring Adj.

TP	ADJ	MODE	Jig & Tool
TP6502 (TP2) TP6503 (TP3) Tension Post	Tension Regulator Spring Position	Loading Condition (Service Mode 7)	VFK1188 (Dial Tension Gauge)
TAPE	M. EQ	SPEC.	
———	D.V.M. Dial Tension Gauge	0.92 V (Play Position) 11 +/- 1gf	

1. Remove the Tray Unit.
2. Place the unit into the no tape loading mode by using Service Mode.
3. Connect the Digital Volt Meter between TP6502 (TP2) and TP6503 (TP3).
4. When pressing the R portion of the Tension Post in arrow direction by Dial Tension Gauge (VFK1188) until the voltage becomes 0.92V (Play Position) as shown in Fig. E-5, loosen screw (C) and adjust the Tension Regulator Spring position (Hook B) so that the tension is in the specification 11 +/- 1gf.
5. Tighten screw (C).

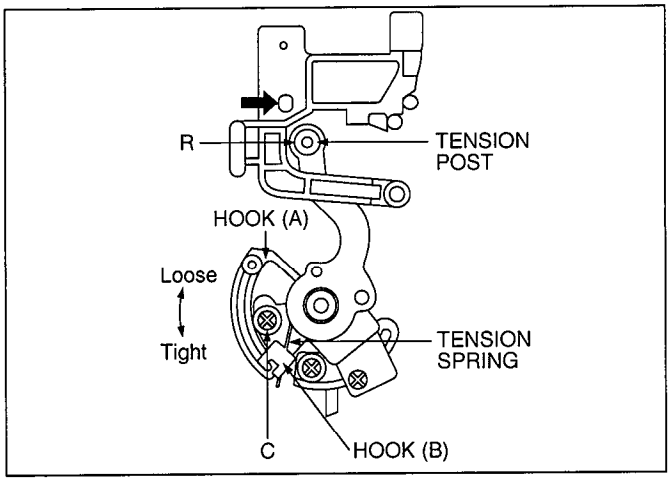


Fig. E-5

1-7. Confirmation of REV Tension

TP	ADJ	MODE	Jig & Tool
TP6502 (TP2) TP6503 (TP3) Tension Post	Tension Regulator Spring Position	Loading Condition (Service Mode 7)	VFK1188 (Dial Tension Gauge)
TAPE	M. EQ	SPEC.	
———	D.V.M. Dial Tension Gauge	-0.92 V (REV Position) 18 +/- 2gf	

1. Remove the Tray Unit.
2. Place the unit into the no tape loading mode by using Service Mode.
3. Connect the Digital Volt Meter between TP6502 (TP2) and TP6503 (TP3).
4. When pressing the R portion of the Tension Post in arrow direction by Dial Tension Gauge (VFK1188) until the voltage becomes -0.92V (REV Position) as shown in Fig. E-5, confirm the tension is in the specification 18 +/- 2gf.
5. If it is not, adjust "1-6. Tension Regulator Spring Adj." again.
6. Grew the screw A, B and C after Tension Arm Adjustment. The grew quantity at B portion is half of A and C portions as shown in Fig. E-6.

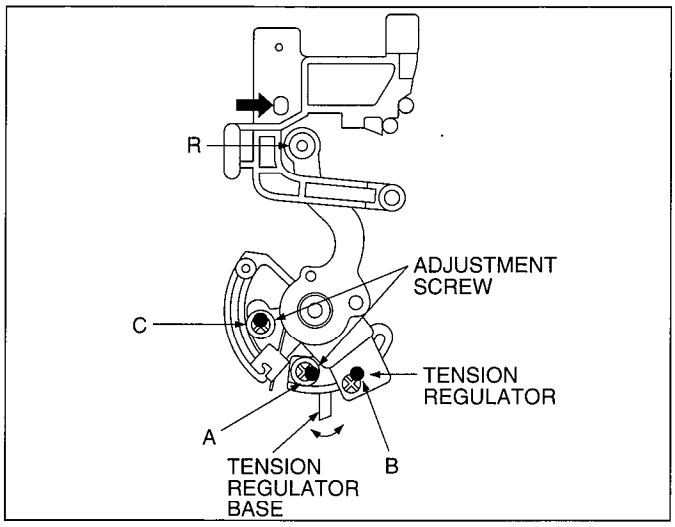


Fig. E-6

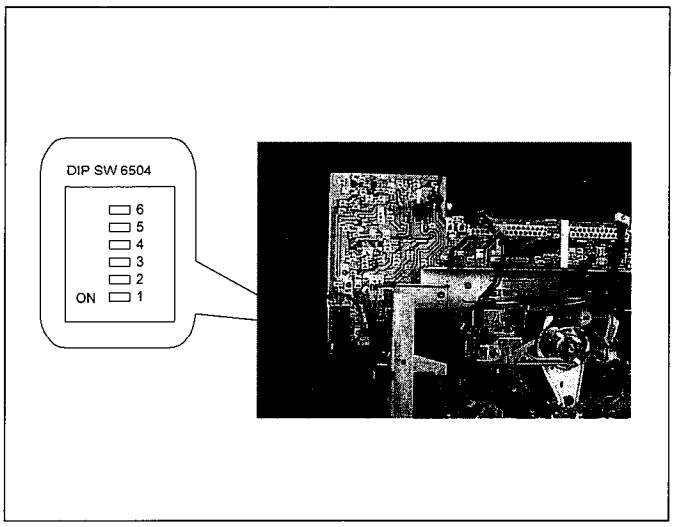


Fig. E-7

1-8. Supply and Take-up Photo Sensor Sensitivity Adj.

[Supply Photo Sensor Adj.]

TP	ADJ	MODE	Jig & Tool
TP6501 TP6504 (S Photo)	DIP SW (S6504)	Stop	VFK1426 (6%) VFK1217 (49%) Sensor Cassette
TAPE	M. EQ	SPEC.	
Sensor Cassette	D.V.M.	0.5 - 1.0 V Refer to Fig. E-8	

[Supply Photo Sensor Adj.]

1. Set all of the DIP SW (S6504) to ON.
2. Insert the 6% Sensor Cassette VFK1426.
3. Connect the Digital Volt Meter between TP6501 and TP6504 (S Photo).
4. Adjust the DIP SW as shown in Fig. E-8.
5. Confirm that the tape is not loaded when installing the 49% Sensor Cassette VFK1217.
6. If the tape is loaded when install the 49% Sensor Cassette readjust this adjustment.

[Take-up Photo Sensor Adj.]

TP	ADJ	MODE	Jig & Tool
TP6501 TP6505 (T Photo)	DIP SW (S6504)	Stop	VFK1426 (6%) VFK1217 (49%) Sensor Cassette
TAPE	M. EQ	SPEC.	
Sensor Cassette	D.V.M.	0.5 - 1.0 V Refer to Fig. E-9	

[Take-up Photo Sensor Adj.]

1. Set all of the DIP SW (S6504) to ON.
2. Insert the 6% Sensor Cassette VFK1426.
3. Connect the Digital Volt Meter between TP6501 and TP6505 (T Photo).
4. Adjust the DIP SW as shown in Fig. E-9
5. Confirm that the tape is not loaded when installing the 49% Sensor Cassette VFK1217.
6. If the tape is loaded when install the 49% Sensor Cassette, readjust this adjustment.

[Supply Sensor]

TP6501 - TP6504 VOLTAGE	DIP SW (S6504) ADJUSTMENT PROCEDURES	RESULT OF THE ADJUSTMENT	REMARKS
When the voltage is 0 - 0.5 V.	1. Change only SW 6 to OFF 2. Change only SW 5 to OFF 3. Change SW 5 and 6 to OFF 4. Change only SW 4 to OFF 5. Change SW 4 and 6 to OFF 6. Change SW 4 and 5 to OFF	If the voltage is not 0.5 - 1.0 V, proceed to the item 2. If the voltage is not 0.5 - 1.0 V, proceed to the item 3. If the voltage is not 0.5 - 1.0 V, proceed to the item 4. If the voltage is not 0.5 - 1.0 V, proceed to the item 5. If the voltage is not 0.5 - 1.0 V, proceed to the item 6.	If the voltage is in the specification (0.5 - 1.0 V), this adjustment is done.
When the voltage is 0.5 - 1.0 V.	This adjustment is not necessary.		
When the voltage is more that 1.0V.	NG Replace the Supply Photo Sensor. Then readjust this adjustment.		

Fig. E-8 Supply Photo Sensor Adj.

[Take-up Sensor]

TP6501 - TP6505 VOLTAGE	DIP SW (S6504) ADJUSTMENT PROCEDURES	RESULT OF THE ADJUSTMENT	REMARKS
When the voltage is 0 - 0.5 V.	1. Change only SW 1 to OFF 2. Change only SW 2 to OFF 3. Change SW 1 and 2 to OFF 4. Change only SW 3 to OFF 5. Change SW 1 and 3 to OFF 6. Change SW 2 and 3 to OFF	If the voltage is not 0.5 - 1.0 V, proceed to the item 2. If the voltage is not 0.5 - 1.0 V, proceed to the item 3. If the voltage is not 0.5 - 1.0 V, proceed to the item 4. If the voltage is not 0.5 - 1.0 V, proceed to the item 5. If the voltage is not 0.5 - 1.0 V, proceed to the item 6.	If the voltage is in the specification (0.5 - 1.0 V), this adjustment is done.
When the voltage is 0.5 - 1.0 V.	This adjustment is not necessary.		
When the voltage is more that 1.0V.	NG Replace the Take-up Photo Sensor. Then readjust this adjustment.		

Fig. E-9 Take-up Photo Sensor Adj.

2. Video Circuit

2-1. Phase Difference of Y/C Sepa. V Blanking Pulse Adj.

TP	ADJ	MODE	Input
TP30001 TP30005	VR30001	Stop (E-E)	Colour Bar Signal
TAPE	M. EQ	SPEC.	
———	Oscilloscope	Phase Difference T 24±0.5H	

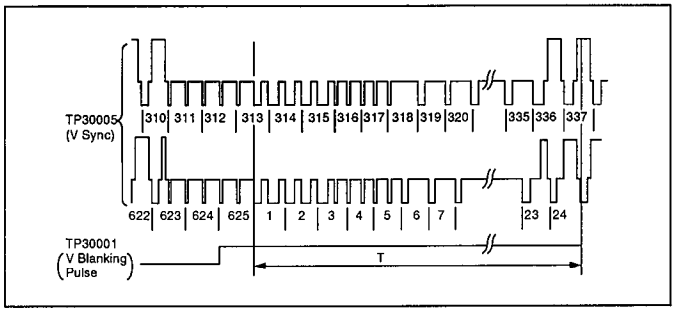


Fig. E-10

2-2. Phase Difference of Y/C Sepa. H blanking Pulse Adj.

TP	ADJ	MODE	Input
TP30004 TP30005	VR30003	Stop (E-E)	Colour Bar Signal
TAPE	M. EQ	SPEC.	
———	Oscilloscope	Phase Difference T=9.0±0.25µsec.	

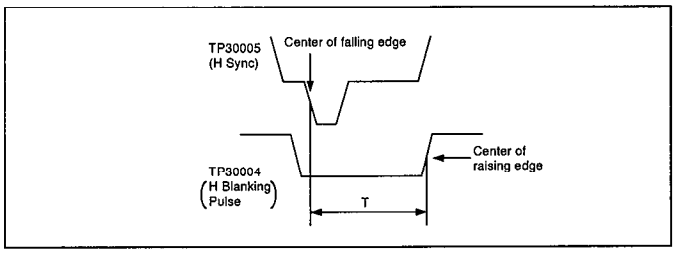


Fig. E-11

2-3. PAL Encoder Free Run Frequency Adj.

TP	ADJ	MODE	Input
TP30009 (TP30010 TP3007, 8)	VC30002	Free Run	———
TAPE	M. EQ	SPEC.	
———	Frequency Counter	Output Freq.= 4.433619MHz±50Hz	

1. Connect TP30010 to GND and put the unit into Free Run mode.
2. Apply 5V DC power to TP30007 and 2.6V DC to TP30008.

2-4.Edit OSD Colour Burst Clock Frequency Adj.

TP	ADJ	MODE	Input
TP30003 (TP30002)	VC30001	Stop (E-E)	———
TAPE	M. EQ	SPEC.	
———	Frequency Counter	Output Freq.= 4.433619MHz±50Hz	

1. Connect TP30002 to GND.

2-5.Edit OSD dot Clock Frequency Adj.

TP	ADJ	MODE	Input
TP30013 (TP30002)	VC30003	Stop (E-E)	———
TAPE	M. EQ	SPEC.	
———	Frequency Counter	Output Frequency= 6.850MHz±50KHz	

1. Connect TP30002 to GND.

2-6.Phase Difference of Color CTL Burst Gate Pulse Adj.

TP	ADJ	MODE	Input
TP30011 TP30012	VR30004	Stop (E-E)	Colour Bar Signal
TAPE	M. EQ	SPEC.	
———	Oscilloscope	Phase Difference T=9.0±0.25µsec.	

1. Connect TP30002 to GND.

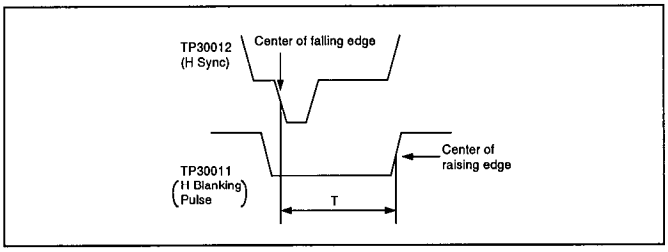


Fig. E-12

2-7.E-E Y Level Adj.

TP	ADJ	MODE	Input
TP3002 (I/O Pack)	VR30002 (Analog Y/C Pack)	Stop (E-E)	Colour Bar Signal
TAPE	M. EQ	SPEC.	
———	Oscilloscope	Y Level= 2.0±0.1Vp-p	

1. Terminate the VIDEO OUT at 75Ω.

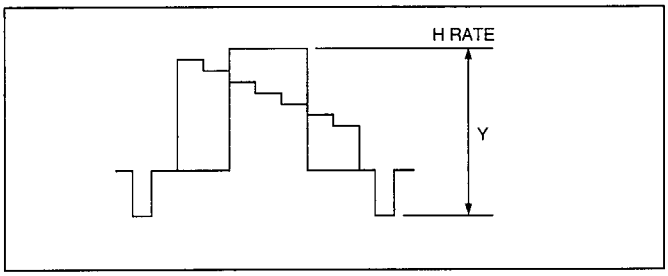


Fig. E-13

3. Audio Circuit

3-1. Level Meter Adj.

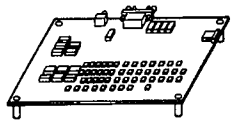
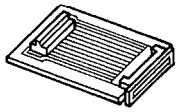
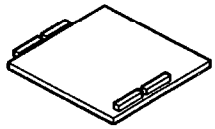
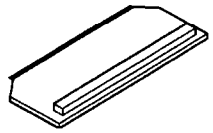
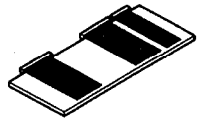
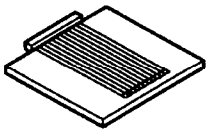
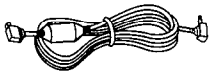
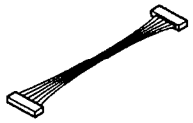
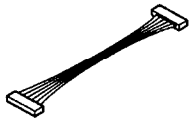
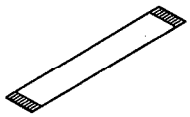
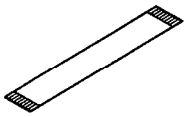
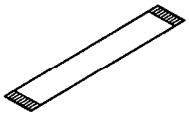
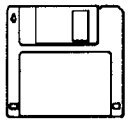
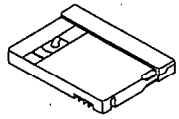
TP	ADJ	MODE	Input
Level Meter on the Front Panel	VR4004	Stop (E-E)	1 kHz, -6dB Audio Signal
TAPE	M. EQ	SPEC.	
———	———	0 [dB] Indicator on the Audio Level Meter just lights up.	

1. Set the Audio Rec Level Volume to center (click position : 5)
2. Set the output level of the Signal Generator to 1 kHz / -6dB and supply it to both Audio Input Line 1 terminals (L) and (R).
3. Adjust VR4004 until the 0dB of the Level Meter on the FIP just lights up.

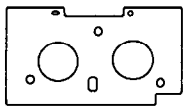
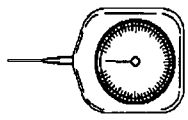
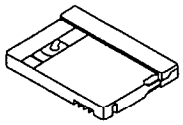
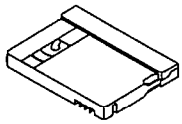
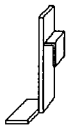
6. SPECIAL FIXTURES AND TOOLS

In order to keep the factory adjustment specifications, the following special tools should be used to conduct mechanical and electrical adjustments and servicing.

Electrical Service and Adjustment

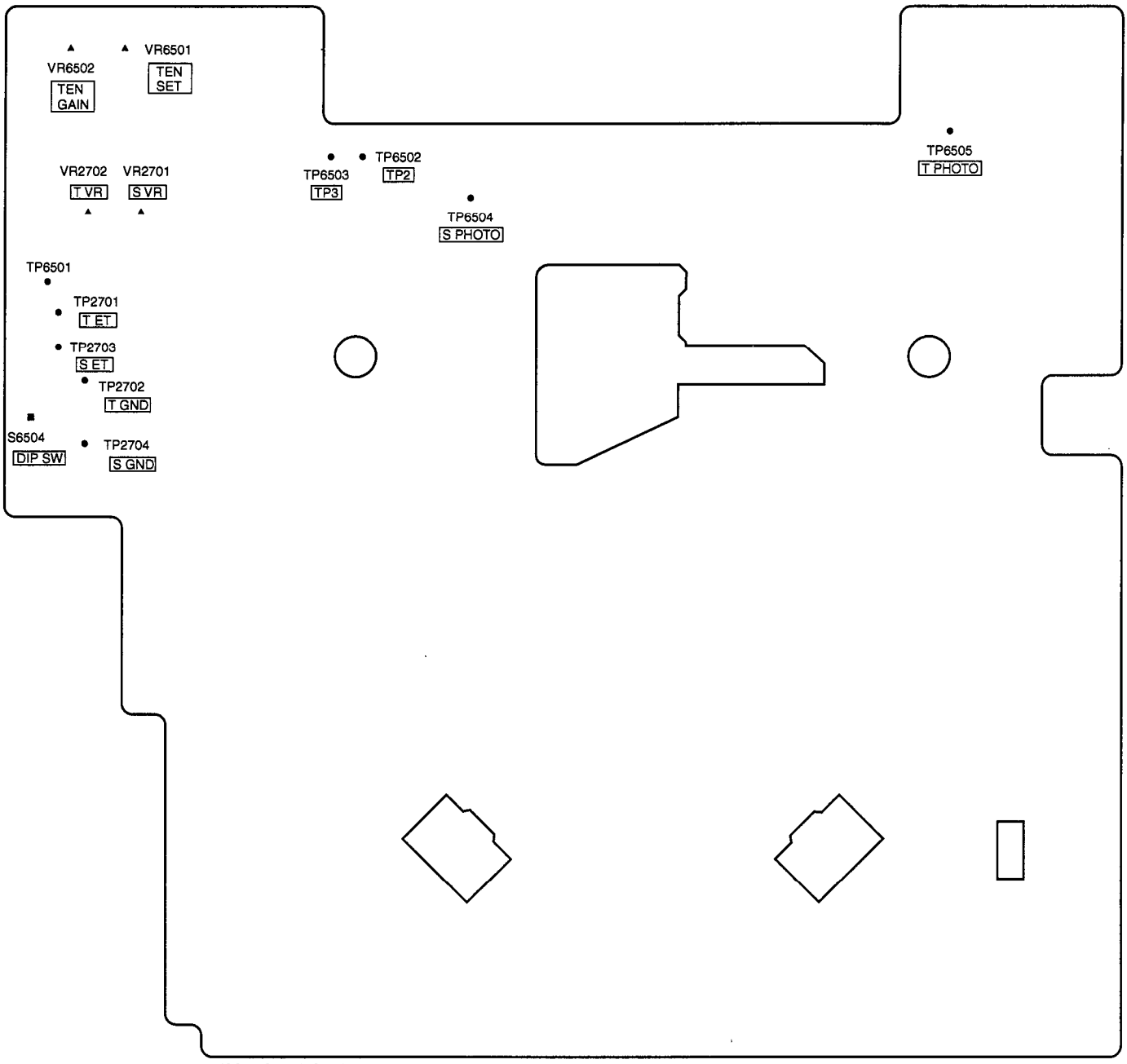
VFK1409 Measuring Board 	**VFK1410** Connection Board 	**VFK1317** 30pin Flat Cable (Needs 2 cables) 	**VFK1405** Audio Extender Board 	**VFK1406** Digital Extender Board 
VFK1407P Y/C Extender Board 	**VFK1408** Motor Extender Board 	**VJA0941** DC Cable (For Measuring Board) 	**VFK1436** 14pin Extender Cable 	**VFK1448** 12pin Extender Cable 
VFK1446 32 Flat Cable 	**VFK1445** 26 Flat Cable 	**VFK0849** 20pin Flat Cable 	**VFK1485** EVR Software 	**VFM3110EDS** Alignment Tape (Color Bar) 

Mechanical Service and Adjustment

VFK1348A Neutral Plate 	**VFK1450** Post Height Fixture 	**VFK1151** Box Driver 	**VFK1149** Post Driver 	**VFK1188** Dial Tension Gauge 
VFK1217 49% Sensor Cassette 	**VFK1426** 6% Sensor Cassette 	**VFK1155** Neutral Position Tool (REV/White) 	**VFK1156** Neutral Position Tool (PLAY/Black) 	**VFK1208** Neutral Position Tool (NEUTRAL/ Black w/Hole) 

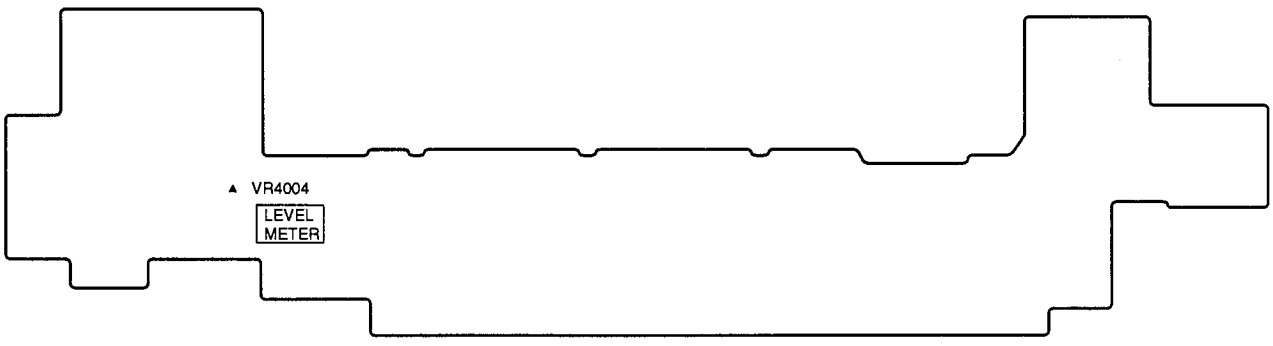
LOCATION OF TEST POINTS & CONTROLS

MECHANISM DRIVE C.B.A.



(COMPONENT SIDE)

TIMER C.B.A.



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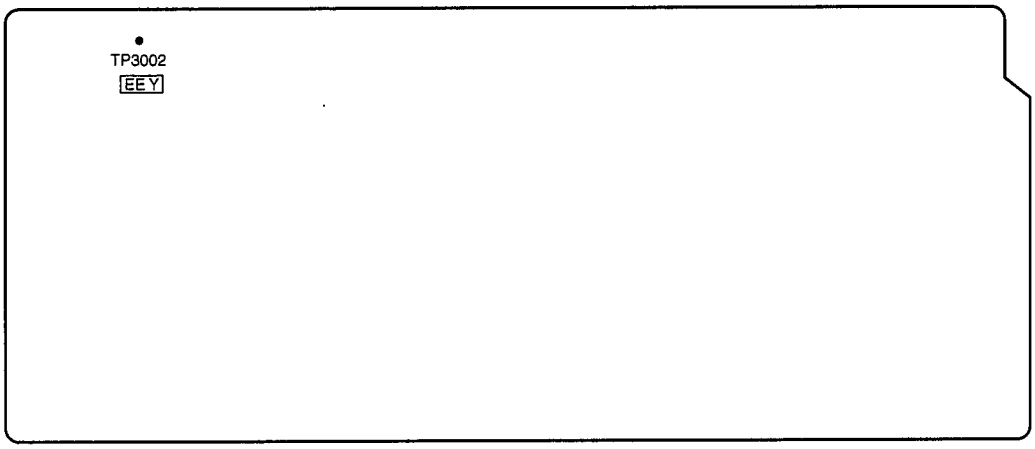
INPUT / OUTPUT C.B.A.



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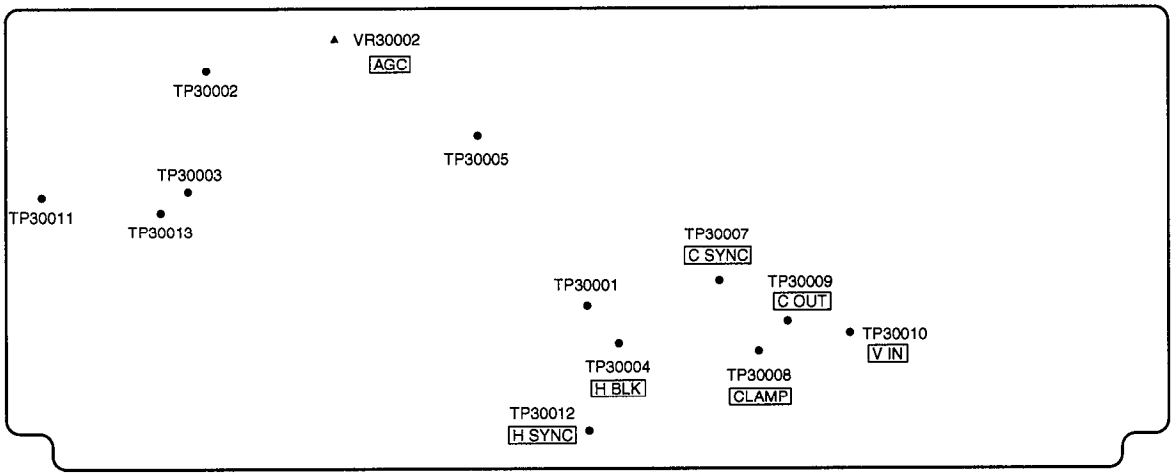
ANALOG C.B.A.



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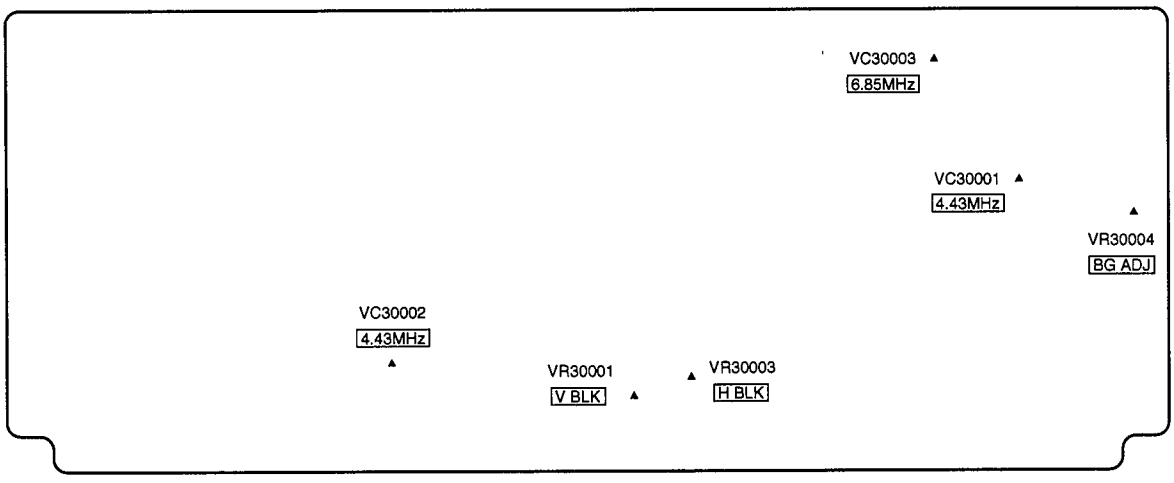

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SECTION 3
BLOCK DIAGRAMS & SCHEMATIC DIAGRAMS

3-1. ABBREVIATIONS

	INITIAL/LOGO	ABBREVIATIONS
A	A GND	Analogue GND
	A. COMP	Audio Component Signal
	A. D.P [L]	Audio Dubbing Pause Ⓛ
	A. DEF [S]	Audio Defeat
	A. DUB P [L]	Audio Dubbing Pause Ⓛ
	A. ERASE	Audio Erase
	A. HASW	Audio Head Amp Switching Pulse
	A. HSW	Audio Switching Pulse
	A. IN [L]	Audio Input (L)
	A. IN [R]	Audio Input (R)
	A. MUT [H]	Audio Mute Ⓗ
	A. MUTE [H]	Audio Mute Ⓗ
	A. OUT [L]	Audio Output (L)
	A. OUT [R]	Audio Output (R)
	A. RF OUT	Audio RF Signal Output
	A. TR	Auto Tracking
	A0-8, 0-17	Memory Address
	A3V2	AD Converter Reference Voltage
	AB0-4	Address Bus
	AB0-4, AB12-15	Address Bus Line 0-4, 12-15
	ABSF	Focus Encoder Input
	AC. O/EE. H	AC Online/EE Ⓗ
	ACI	Analogue Channel Cording IC
	AD	AD Converter
	AD	Auto Date, Analogue Digital Converter
	AD CLK	AD Clock
	AD REC	Audio Delayed REC
	AD0-6	Address
	AD0-6, ADR0-6	Address Data Line
	ADCLK	Analogue Digital Converter Clock
	ADCNT	Analogue Digital Control
	ADCS	Analogue Digital Chip Select
	A-DET	Audio Detect
	ADREC	Audio Delaied Rec
	ADUB	Audio Dubbing
	AE	Auto Expose
	AECNT	Auto Expose Control
	AEE(H)	Audio E-E (H)
	AEH	Audio Erase Head
	AEIRQ	Auto Expose Interrupt Request
	AF DIS CS	AF DIS Chip Select
	AFC S C	AFC S Curve
	AFC [S]	AFC S Curve
	AFC. DEF	AFC Defeat
	A-FADE(L)	Audio Fade (L)
	AF-AMP	AF HALL Bias
	AFCS	Auto Focus Chip Select
	AFRP	Audio PLL Voltage Control
	AGC	Automatic Gain Control
	AGCCNT	Automatic Gain Control Control
	AGND	Analogue Ground/Audio Ground
	AGS	Anti Ground Shooting
	AH(P) / (R)	Audio Head (Play) / (Record)
	AHASW	Audio Head Amp Switch Pulse
	AHSW	Audio Head Switch Pulse
	AI, AO	Buffer Input, Output
	AIBCK	Bit Clock (to A/D Converter)
	AIDAT	Serial Data (to A/D Converter)
	AILRCK	L/R Clock (to A/D Converter)
	AIMCK	Master Clock (to A/D Converter)
	ALC CNT	Auto Level Control Control
	ALC MAIN	Auto Level Control Drive
	ALE	Address Latch Enable
	A-LOCK	Full Auto Switch
	ANLPTH	Analogue Loop Through High
	AORP	Audio Overlap Pulse
	APCNT	Aperture Control
	APS	Auto Power Save
	ART. V	Artificial Vertical Sync Signal
	ART. V. MM	Artificial Vertical Sync Signal Mono Multi
	ART. V/H/N	Artificial Vertical Sync Signal Ⓗ/Normal
	AT. V/H/N	Artificial Vertical Sync Signal
	ATSW/TEST/NOR/SE	Test/Normal/Service
	AT CNT	Automatic Tracking Gain Adjust
	ATF	Automatic Track Finding
	ATFCLK	41.85MHz Clock
	ATFG	Auto Track Gain
	ATL	Auto Lock Select
	ATN	Absolute Track Number
	ATR OFF(H)	Auto Tracking Off (H)
	ATV	Advanced TV
	AUDIO SELECT [H]	Audio Select Ⓗ
	AVDD	Analogue VDD
	AVSS	Analogue Ground
	AWTB	Auto White Balance B-Y
	AWTR	Auto White Balance R-Y
B	B MODE. H	B Mode Ⓗ
	B.G.P	Burst Gate Pulse
	BACK	Back-up
	BACK UP	Microcomputer Back-up
	BACK VDD	Back-up Power
	BATT	Battery
	BATT ALARM	Battery Alarm
	BATT REF	Reference Voltage for Battery
	BCB	B Carrier Balance
	BCBM(B-Y)	B-Y Carrier Balance
	BCBM(R-Y)	R-Y Carrier Balance
	BD0-7	REC/Play In/Out Buss
	BDCK	Standard Bus Data Clock (9MHz)
	BDEN	Standard Bus Data Enable
	BEND	Data Block End Request
	BF	Burst Flag Pulse
	BFA	Burst Flag Pulse for Encorder
	BFO/BFI	Burst Flug Input/Output
	BI, BO	Buffer Input, Output
	BI/MI [L]	Bilingual/Mix Ⓛ
	BIL	Bilingual
	BIL [L]	Bilingual Ⓛ
	BL	Back Light
	BL ON	Back Light ON (L)
	BL4V	Back Light 4V
	BLC 0, 1	Back Light Y Control Out, In
	BLDI/O	Back Light Drive Input/Output
	BLK	Blanking Pulse
	BLKA	Blanking for Encorder

	INITIAL/LOGO	ABBREVIATIONS
	BLKA	Blanking Pulse for Encorder
	BLKI/O	Blanking Pulse In/Out
	BLKZ	Blanking Pulse for Zoom Encorder
	BM	Balance Modulator
	BQUIET	Bus Out Control Signal
	BS CLOCK	BS Clock
	BS DATA	BS Data
	BS LCH IN	BS L Channel Input
	BS MIX [H]	BS Mix Ⓗ
	BS MONI [H]	BS Monitor Ⓗ
	BS MONI [H]	BS Monitor Ⓗ
	BS RCH IN	BS R Channel Input
	BUF IN/OUT	Buffer In/Out
	B-Y KB	B-Y Carrier Balance
	B-YO	B-Y Signal Out
C	C A In/Out	Pre-Aperture In/Out
	CAPSTP	Capstan Stop Flag
	C CNT	Colour Control
	C SYNC	Composite Sync Signal
	C/N	Carrier/Noise
	C0-7, C00-07	Chrominance Signal 0-7
	CAGAIN	Aperture Gain Control
	CAM TL	Capstan Trque Limit
	CAP EC	Capstan Trque Control
	CAP M GND	Capstan Motor GND
	CAP P(H)	Capstan Power On (H)
	CAP R/F/S	Capstan Reverse (H)/Stop (M)/Forward (L)
	CAP SW	Capstan Power Control Switch
	CAP. ET	Capstan Torque Control
	CAP. FG1	Capstan FG1 Pulse
	CAP. FG2	Capstan FG2 Pulse
	CAPSTP H	Capstan Stop Flag (Stop High)
	CAPVM	Capstan Motor Current
	CAPVS	Capstan Motor Power Control Switch
	CAS. SW	Cassette SW
	CAS	Compresion, Audio Process, Shuffling/Deshuffling
	CAS	Memory Address Strobe (Active Low)
	CASDOWN, DWN	Cassette Down (L)
	CB, CR	Chroma B, Chroma R
	CBLK	Composite Blanking Pulse
	CC	Channel Cording
	CCA	Curent Drive Control
	CCA	Current Control Amp
	CCD	Charge Coupled Devise
	CCW	Counterclockwise
	CD SP0-7	Digital Chroma
	CDS	Correlate Double Sampling Signal
	CDS1, 2	Sampling Pulse for CCD Output Signal
	CE	Chip Enable
	CE	Control Pulse Erase
	CEC	Capstan Error Code
	C-ERA(H)	Control Erase (H)
	CFEM	Chrominance Memory Signal
	CFM	Chrominance Field Memory
	CFM1-4	Chroma Field Memory Signal
	CG CLK	Character Generator Clock
	CG CLK DATA	Clock Generator Data
	CG DATA	Character Generator Data
	CGC	Chrominance Gain Control
	CGCS	Character Generator Chip Select
	CGO	Character Generator Serial Data
	CH	Charge

	INITIAL/LOGO	ABBREVIATIONS
	CH1	Channel 1 (Odd Field)
	CHR	Character
	CHR BACK	Character Back-up
	CHR MIX	Character Mix
	CI, CO	Buffer In/Out
	CI,CO	Buffer Input & Output
	CIF	Control Signal Forward Input
	CIF, CIR	Positive Control Pulse, Negative Control Pulse
	CIR	Control Signal Reverse Input
	CK	Clock
	CKL	Ratch Lock
	CKS	Shift Lock
	CL/CLK	Clock
	CLASS	Classeffication Signal for Compress (DCT/VLC)
	CLASS 0.1	Class Control Signal Durring DCT/VLC
	CLK135	13.5MHz System Clock
	CLK18	18MHz System Clock
	CLK2	Clock 2 (824XFH: 12.875MHz)
	CLK246	24.576MHz Clock
	CLK27	27MHz System Clock
	CLK450	450KHz Clock
	CLKDCLK	Digital Clock
	CLK-PH	Clock Phase Control
	CLK-REF	Reference Clock
	CLP-RST-H	Clamp Reset High Signal
	CLY FG	Cylinder FG Signal
	CMEMO0-3	Chroma Memory Output Signal 0-3
	CMIX	Character Mix
	CMO	Chrominance Memory Output
	COL/B/W/NOR	Colour/Black & White/Normal
	COLOR [H]	Colour Ⓗ
	COMPC	Position Detection Pulse
	COM RDY	Serial Enable Signal
	CNCLK	Clock
	CNR	Chrominance Noise Reduction
	CNT, CONT	Control
	CO	Control Out
	CO0-7	Chrominance Output 0 to 7 (Digital)
	COM	Common
	COM RDY	Serial Transmission Enable
	COMB	Comb Filter
	COS EQ	Cosin Equalizer
	CP	Clamp Pulse
	CP ON(H)	Camera Power On(H)
	CP2, 20	Clamp Pulse
	CP2A, CP2O	Encoder Clamp Pulse
	CPN	Component Signal
	CPOB	Clamp Pulse for Optical Blanking
	CPS	Composite Signal
	CPV	Gate Scan Clock
	CR OUT	Pre Apature Out
	CR POW SW	Camera Remote Power On Switch
	CRA	Aperture Gain Control
	CRA	Pre Apature Gain Control
	CS	Chip Select
	CS 0-7	Chrominance Signal Out 0-7
	CSEL	Clock Phase Select
	CSI 0-7	Chrominance Signal In 0-7
	CTSW	Crosstalk Switch
	CURR	Current
	CURRENT LIM	Current Limmiter
	CW	Clockwise
	CYL ET	Cylinder Motor Trque Control

	INITIAL/LOGO	ABBREVIATIONS
	CYL PG	Cylinder Motor PG
	CYL VM	Cylinder Motor Current or Power
D	D CLK	Digital Clock
	D MODE	Digital Mode Switch Signal
	D. FM REC [H]	Delaied FM Recording Ⓗ
	D. FM REC [L]	Delaied FM Recording Ⓛ
	DA UV SEL	D/A Convertor U/V Select
	DAC	Digital Analogue Converter
	DAG	Digital Analogue Ground
	DB0-7	Data 0-7
	DB0-7	Microprocessor Data
	DCC	DC Clamp Control
	DCCNT	DC Control
	DCI	Digital Channel Cording IC
	DCLR	Digital Clear
	DCP	Digital Clamp Pulse
	DCS-CLK, DA	CAS & DV I/F Serial Clock
	DC-STP1	DCS Serial Start
	DC-STP2	DCS Serial Stop
	DCT	Discrete Cosine Transform (Compression)
	DCX7	Serial Data
	DEDP 0-3	Playback Data
	DEDR 0-3	Rec Data
	DEMO	Demodulation
	DEMP	A/D Convertor Empahsis Control
	DEMP	De-Emphasis
	DFD 0-7	Encode Data In/Out Between Shaffling Memory
	DFD0-7	Encode Input/Output Signal for Shuffling Memory
	DIBDCK	Bit Clock
	DICLK	Digital Clock
	DIDAT	Serial Data
	DIDAT	Serial Data Durring Digital Audio In
	DIF	Digital Interface
	DILRCK	L/R Clock
	DILRCK	Serial Clock Durring Digital Audio In
	DIMCK	Master Clock
	DIMCK	Mater Clock Durring Digital Audio In
	DIO 1-8	Data In/Out
	DIOS	Data In/Out Select Control Signal
	DIOS	Select Signal for Digital In/Out
	DIS	Digital Image Stabilizer
	DIS R/B	Digital Image Stabilizer Read (H)/Busy (L)
	DIS R/B	DIS IC Rady/Busy
	DIS/KAND	Digital Image Stabilizer/Sensitivity
	DISCS	Dis Chip Select
	DISP	Display
	DL	Delay Line
	DOBCK	Audio A/D Convertor Bit Clock
	DOCTL	Data Output Control Signal
	DODAT	Serial Data (to D/A Converter)
	DOLRCK	Audio A/D Converter LR Clock
	DOLRCK	L/R Clock (to D/A Converter)
	DOMCK	Audio A/D Converter Master Clock
	DOMCK	Master Clock (to D/A Converter)
	DQ 1-16	Memory Data
	DRAM CAS	D-RAM Colum Address Strobe
	DRAM OE	D-RAM Out Enable
	DRAM RAS	D-RAM Read Address Strobe
	DREC	AV Delayed REC Start Pulse
	DRK	Dark (LPF Switch for Auto Focus)
	DS1, 2	Double Sampling Pulse
	DSF 0-7	Data In/Out for Shaffling Memory

	INITIAL/LOGO	ABBREVIATIONS
	DSF 0-7	Input/Output Data to Shuffling Memory (18MHz)
	DSP	Digital Signal Processor
	DSP R/B	DSP IC Rady/Busy
	DSP-48K-H	DSP IC Clock Select
	DSTB	Data Stobe Signal
	DSV	Digital Sum Variation
	DV	Digital Video
	DVB	Digital Video Broadcast
	DVC	Digital Video Cassette
	DVDD	Digital VDD
	DVIO	Digital Video Input Output
	DVSS	Digital GND
E	E2 CS or E2P CS	EEPROM Chip Select
	E2 R/B	EEPROM Rady/Busy
	E2P	EEPROM
	EARP	Earphone
	EC	Torque Control
	ECC	Error Correction Cording
	ECM	Electric Condencer Mic
	ECR	Reference Voltage for Capstan Torque
	EDA	Error Correction, DCI, ATF Servo
	EDT TRIG [L]	Edit Trigger Ⓛ
	EDIT [H]	Edit Ⓗ
	EE [H]	EE Ⓗ
	EE CS	EEPROM Chip Select
	EE R/B	EEPROM Read (H)/Busy (L)
	EEPROM	Electric Erasable Programable Read Only Memory
	EIS	Electric Image Stabilizer (DIS)
	EMP	A/D Convertor Emphasis Control
	ENAB	Enable
	ENV	Enverope
	EOB	End of Block
	EP [H]	LP Ⓗ
	EP/LP [H]	LP Ⓗ
	EP/LP/SP	LP/SP
	EP/SS [H]	LP/Slow/Still/Stop Ⓗ
	EPROMCS	EPROM Chip Select
	EQ	Equalizer
	EXT S DATA	Serial Data for Edit
	EXT SCK	Serial Clock for Edit
F	FACT MODE	Factry Mode (not used in the service)
	FB	Feed Back
	FC	Saw Tooth Signal In
	FCK	Clock
	FCO	Saw Tooth Signal Generator
	FEND	Frame End Pulse
	FF/REW [L]	First Forward/Rewind Ⓛ
	FG1 IN	FG1 Pulse Input
	FG2 IN	FG2 Pulse Input
	FH2B	FH/2 (15.625KHz / 2=7.8125KHz)
	FIX OSD	Auto Tracking Off (H)
	FLICK	Flicker Output
	FLY ERASE [H]	Flying Erase Head On Ⓗ
	FM	Field Memory
	FM MUT [H]	FM Audio Mute Ⓗ
	FM MUTE [H]	FM Audio Mute Ⓗ
	FM0-7	Field Memory 0-7
	FMCO0-3	Field Memory Chrominance Out 0-4
	FMDIR	Focus Motor Direction
	FMOEM	Field Memory Enable
	FMOEO	Field Memory Enable

	INITIAL/LOGO	ABBREVIATIONS
	FMT1-4	Focus Motor Terminal 1-4
	FMY00-07	Field Memory Luminance Out 0-7
	FMYI0-07	Field Memory Luminance In 0-7
	FNO	F Value
	FPS	Frame Refference Signal
	FR	Capstan Reverse High
	FRP	Frame Refference Pulse
	FRPSO	Frame Start Pulse
	FUL. E [H]	Full Erase Head On Ⓗ
	FULL. E [H]	Full Erase Head On Ⓗ
G	G1, G2, G3	Gap 1, 2 and 3
	GCA	Gain Control AMP
	GCNT	Gain Control
	G-CNT	AGC Adjustment
	GCTRL	Gain Control
	GENE	Generator
	GF	FG AMP Terminal
	GSW	Ground for Switching Power
H	H/M/N	Hi-Fi / Mix / Normal
	H/N	Hi-Fi / Normal
	H. SYNC	Horizontal Sync
	HAP	Horizontal Aperture
	HASW	Head AMP Switching Pulse
	HB	Hall Bias
	HBR SET	High Brightness Set
	HBRST	High Brightness Set
	HCLR	High Clear
	HCP	Shift Clock for Horizontal Drive
	HD	Horizontal Drive Pulse
	HDTV	High Definition TV
	HEX	Hexadecimal
	HG	Hall Gain
	HID	Head Switching Pulse
	HLT	High Bright Signal
	HALL IN(+), (–)	Input Signal from Hall IC
	HP	Headphone
	HPF	High Pass Filter
	HSE	Modulated Data Output
	HSP	Timing Pulse for Shaffling Memory
	HSS	Horizontal Sync Signal
	HSW	Head Switching Pulse
I	I/F	Interface
	I-2 C	Inter Integrated Circuit
	ID(H)	Wide Television (H)
	IMP	Inter Microprocessor Protocol
	IN SELA1	Input Select A1 Position
	IN SELA2	Input Select A2 Position
	IN SELA3	Input Select A3 Position
	INS L/R [L]	Insert Lch/Rch Ⓛ
	INS. [H]	Insert Ⓗ
	INTER	Interval Recording
	INV	Inverter
	IOU	R-Y Analogue Signal Output
	IOV	B-Y Analogue Signal Output
	IOY	Y Analogue Signal Output
	IR	Infrared Rays
	IRDET	Imfrared Ray Detection
	IREF	Current Adjustment Terminal
	IRIS/SH	Iris / Shutter Control
	IRQ	Interrupt Request

	INITIAL/LOGO	ABBREVIATIONS
	ITI	Insert & Track Information
J	JPEG	Joint Photographic Image Cording Experts Group
K	KANDO	Digital Gain Up
	KB	Carrier Balance
	KEY IN	Key Scan
	KND	Digital Gain Up
	KNEE	Luminance Compensate
L	LD	Load Pulse
	LEDCNT	LED Control
	LI-BATT	Lithium Battery
	LOAD	Loading
	LOAD F, R	Loading Direction (F: Forward / R: Reverse)
	LPF	Low Pass Filter
	LRMONO	Monoral Audio (L + R)
	LSB	Least Significant Bit
	LVL	LPF Switch for Auto Focus
M	M GND	Motor GND
	M1-3	Motor Coil Terminal 1 to 3
	MA0-5	Microprocessor Address Data 0-5
	Mbps	Megahertz Bit Per Second
	MD	Modulation
	MD0-7	Microprocessor Data 0-7
	MDT0-7	Microprocessor Data 0-7
	ME (TAPE)	Metal Evaporated (Tape)
	MES [H]	Mesecam Ⓗ
	MESE [H]	Mesecam Ⓗ
	MESE [L]	Mesecam Ⓛ
	METER 5V	Level Meter 5V
	METER [L]	Level Meter (L)
	METER [R]	Level Meter (R)
	METER. L/AVS	Level Meter (L)
	METER. R/AVS	Level Meter (R)
	MHSYNC	Monitor Horizontal Sync Signal
	MI/BI [L]	MIX Ⓗ/Biligual
	MIC	Memory In Cassette
	MIG	Meta In Gap
	MIX N.R.D.	Non Rec Data Mix
	MOD	Modulation
	MODE SEL	Audio Mode Select
	MODE SW	Audio Mode SW
	MONO [H]	Monaural Ⓗ
	MOUT	Mic Out
	MP (TAPE)	Metal Particle (Tape)
	MSB	Most Signal Bit
N	N/P	NTSC/PAL
	NB1-3	Base for NPN Transistor
	NC	No Connection
	NC1-3	Corrector of NPN Transistor
	NCLR	Power On Reset
	NCP1	Clamp Pulse
	NDE	Non Liner De-Emphasis
	NE	Emitor of NPN Transistor
	NLE	Non Liner Emphasis
	NR	Noise Reduction
	NRD	Non Rec Data
	NRD BLK	Non Rec Data Blanking
	NRD CLK	No Rec Data Clock
	NRE	Read Enable Input (Low Active)

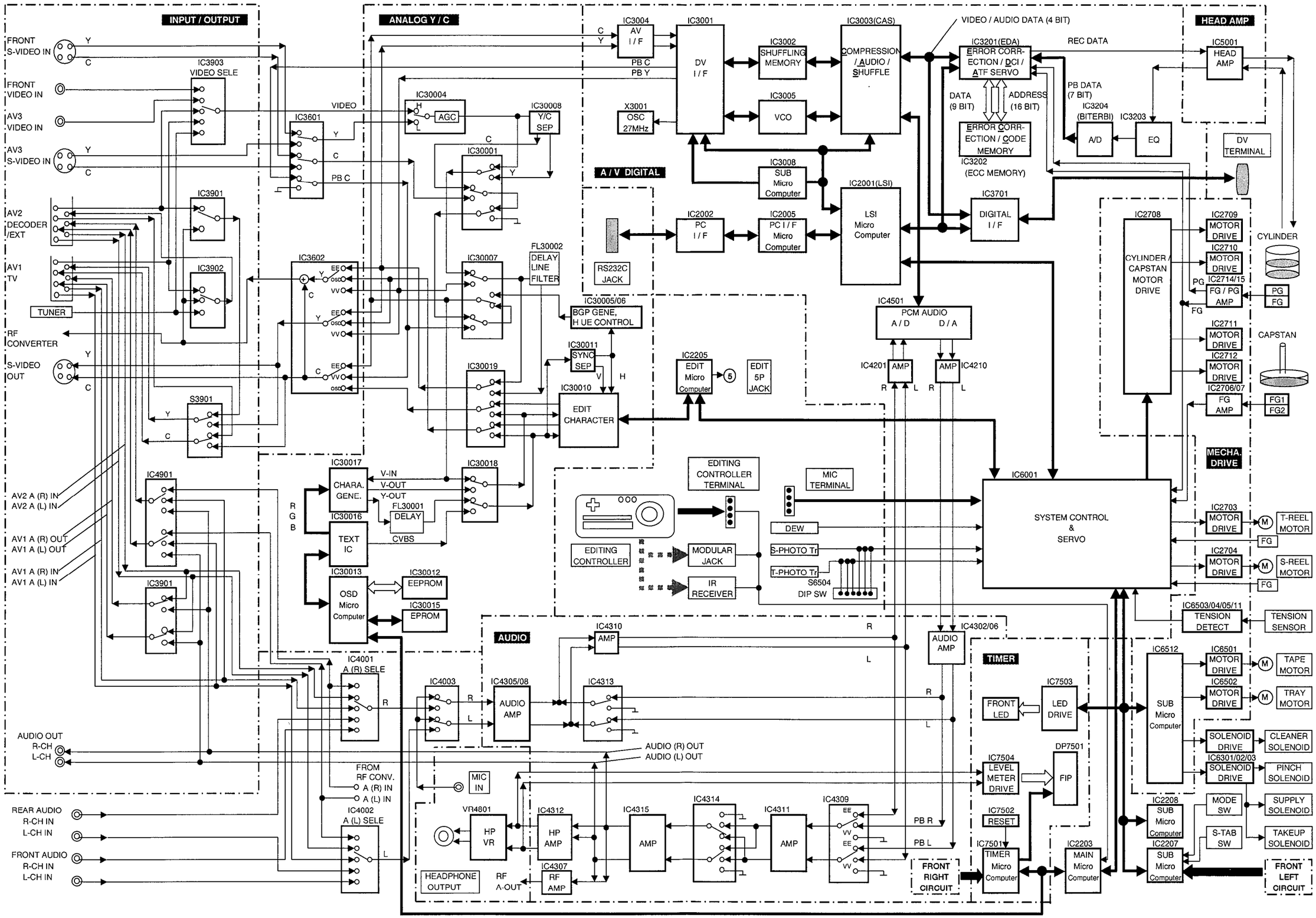
	INITIAL/LOGO	ABBREVIATIONS
	NWE	Write Enable (Low Active)
O	OB	Optical Black
	OBCNT	Optical Black Control
	OBREF	Reference Voltage for Optical Black Control
	OCH	Control AGC Circuit
	OE	Output Enable
	OFH	Horizontal Counted Down Clock Signal (Reference)
	OFS	Offset
	OP	Operation AMP Output
	OSD	ON Screen Display
	OVL	Overlap Pulse
P	P. FAIL	Power Failure Detect
	P. OFF [H]	Power Off Ⓗ
	P. OFF [L]	Power Off Ⓛ
	P SW	Power Switch
	PB1-3	PNP Base 1-3
	PBCTL	Play Back Control
	PBCTL	Pre-Branking Control
	PBH	Head Amp Switch
	PBLK	Pre-Blanking (Pulse)
	PC1-3	Corrector of PNP Transistor
	PCBM	Carrier Balance
	PCH	Phase Compensator (Hall AMP)
	PCI	Phase Compensator (Current)
	PCO	Phase Compensator Out
	PCS	Switching Power Control
	PCV	Phase Compensator (Voltage)
	PE	Emitter of PNP Transistor
	PED	Pedestal
	PEDECNT	Pedestal Control
	PENO	Alarm (L)
	PFP	Pilot Frame Position
	PGA, B	Power Ground A, B
	PGC	Pulse Generator Comparator
	PGI	Pulse Generator Input
	PGMM	Pulse Generator Monostable Multivibrator
	PGO	Output of Pulse Generator AMP
	PMODE	Select Signal for Normal / Wide Screen
	PON	Power On
	POR	Power On Reset
	POSCOM	Common Position
	PREAMP	Pre-AMP
	PREBLK	Pre-Blanking
	PT	Protect for V Voltage
	PWM	Pulse Width Modulation
	PWMB	Pulse Width Modulation Pulse
	PWRFAIL	Power Failure Detect
Q	Q2H	Source Output Select
R	R CTL P	Recorded Control Pulse (+)
	R CTL R	Recorded Control Pulse (–)
	R/B	Read/Busy
	R/L	Direction Control for Data Transmition
	R/S/F	Reverse Ⓗ/Stop Ⓜ/Forward Ⓛ
	RA	Recording AMP
	RA1	Rec AMP 1
	RAC AC	Rec Audio Current
	RAD	Read Address Data
	RAE	Read Address Enable
	RB	Read Busy

	INITIAL/LOGO	ABBREVIATIONS
	R-B	R Bias
	RCB	R Carrier Balance
	RE	Read Enable
	RE(F), (S)	Rotary Erase Head Transformer
	REB	R Bias
	REC CC	Rec Current Control
	REC CCNT	Rec Current Control
	RECCTRL	Recording Control Pulse
	RECI	Rec Amp Switch
	RENCF	Lens Control (Forward)
	RENCR	Lens Control (Reverse)
	RERASE	Rotary Erase Head
	RF. CHROMA	RF Chrominance Signal
	RGBIV1-2	1V Inverted Signal 1-2
	RGO R/G OFF	Offset Voltage for AWT R
	RSF	Capstan Direction (Reverse / Stop / Forward)
	RST	Reset
	RSTB	R Strobe
	RSTPWD	Reset Power Down Input
	RSTR	Reset Read
	RSTW	Reset Write
	RT	Saw Tooth Terminal
	RVCO	Resister for Oscillation
	RW	Read Write
	RWAE	Read Write Enable
S	S IN	Serial Data Input
	S OUT	Serial Data Output
	S-PHOTO	Supply Photo Transistor
	S-RL. PLS	Supply Reel Pulse
	S. CLK	Serial Clock
	S. CLK/AV	Serial Clock/AV
	S. DATA	Serial Data
	S. TAB [L]	Safety Tab SW ON Ⓛ
	S/H	Sampling Hold
	S/PIN	SECAM/PAL/NTSC
	S/S	Start/Stop
	SBD	Serial Data
	SBI	Serial Data Input
	SBO	Serial Data Output
	SBT	Serial Clock
	SC IN	Serial Clock Input
	SC OUT	Serial Clock Output
	SCAN0-5	Key Scan 0-5
	SCK	Serial Clock
	SCK SELECT	Serial Clock Select
	SCR	Search
	SCR, S.C.R.	Still Cue Review
	SEG.	Segment
	SET	White Balance Set
	SH/IRIS	Shutter/Iris Control
	SHIFT	Capasitor for Phase Shift
	SI	Serial Data Input
	SIC	Shift In Clock Input
	SIF	Sound Intermediate Frequency
	SIOC	Serial In/Out Control
	SMCE	Shaffling Memory Chip Enable
	SMRS	Shaffling Memory Read Strobe
	SMWE	Shaffling Memory Write Enable
	SMWS	Shaffling Memory Read Strobe
	SNAP	Snap Shot
	SNS LED	Sensor LED
	SO	Serial Data Output

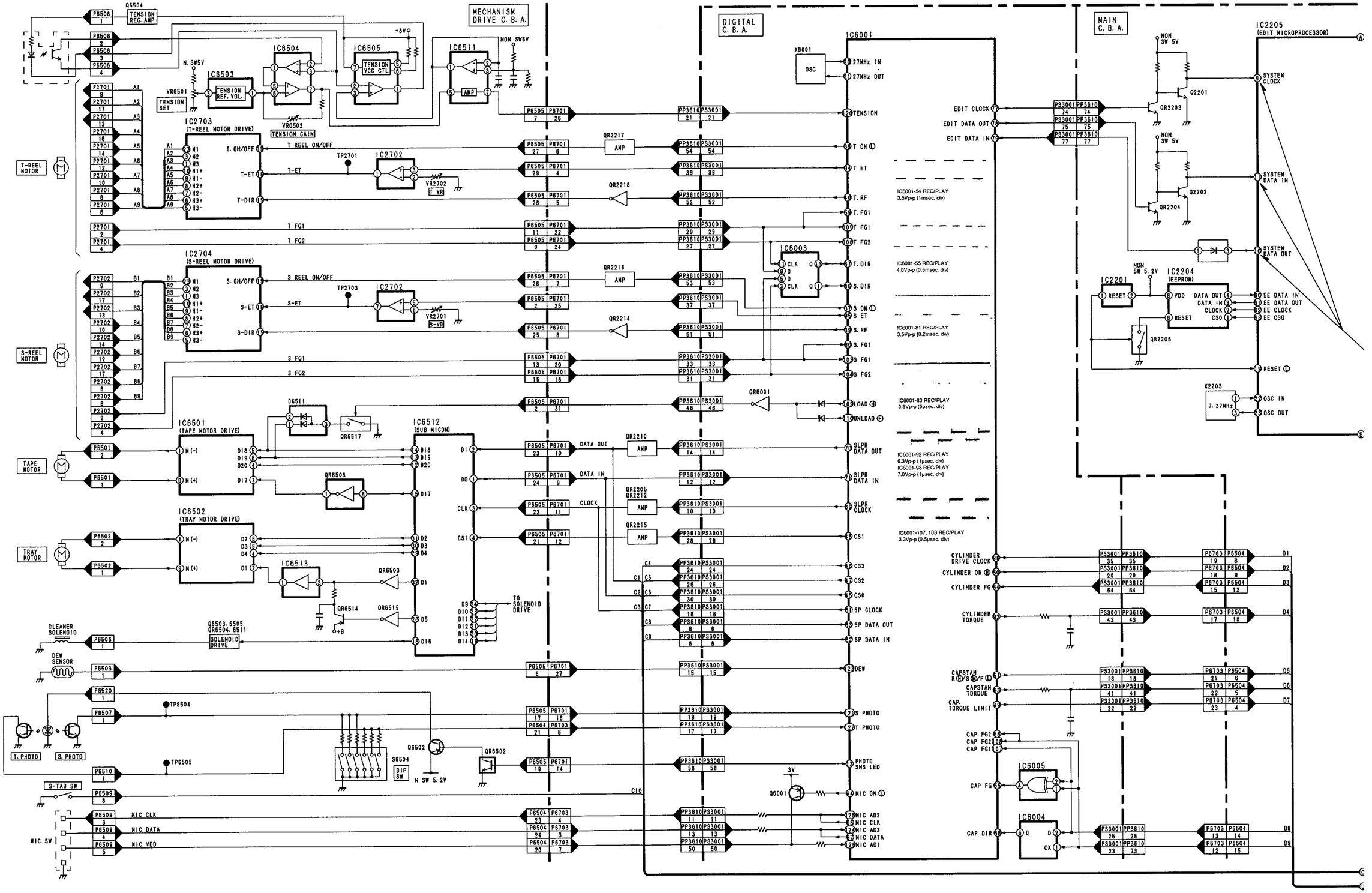
	INITIAL/LOGO	ABBREVIATIONS
	SPA	ATF Smapling Pulse
	SPEN	8 Bit Shift Register Enable
	SPK	Speaker
	SPO	Reset for Switcing Power
	SPST	8 Bit Shift Register Strobe
	SREELP	Supply Reel Pulse
	SRT	Start
	SSA	Start Sync block Area
	SSS [L]	Slow/Still/Stop
	SSW	Select Signal for Low Pass Filter
	ST5V	Safety Tab 5V
	STAB	Safety Tab Switch
	STB	Stand by Signal
	STB	Strobe
	SWB	Switching Pre-Drive Pulse
	SYL EC	Cylinder Torque Control
	SYL FG	Cylinder FG
T	T-PHOTO	Take-Up Photo Transistor
	T-RL. PLS	Take-Up Reel Pulse
	T. BUSCLK	Timer Bus Clock
	T. BUSLSN	Timer Bus Listen
	T. BUSTLK	Timer Bus Talk
	TBC	Time Base Conntrol
	TFT	Thim Film Transistor
	TH	Thermostat for Battery
	TI	Test Mode Select
	TL	Torque Limit
	TM	Sub Code
	TMD	Sub Code Data
	TRE	Tracking Error Signal
	TREEL(P)	Take-up Reel (Pulse)
	TRFIX	Tracking Fix
	TRIWAVE	Tracking Wave
	TRP	Tracking Position
	TRP	Trap
	TSR	Head Switching Refference
	TST	Time Scale Transfer
	TU. AUDIO	Tuner Audio
	TU. GND	Tuner GND
	TU. V. IN	Tuner Video Signal Input
	TU. VIDEO	Tuner Video
U	U/V SEL	R-Y/B-Y Select Signal
	UNLOAD	Un-Loading
	UNRE	Microprocessor Read Enable
	UNWE	Microprocessor Write Enable
	UV	R-Y/B-Y
	UV SEL	R-Y/B-Y Select Signal
V	V. REF	Reference Voltage
	V. EE [H]	Video EE Ⓗ
	V. EE [L]	VIdeo EE Ⓛ
	VCO REF	Reference Oscillater
	V1-V4	V. CCD Drive Pulse
	VB	VH Filter Switching
	VCE	Power Terminal
	VCNTL	Video Control
	VCO	Voltage Control Oscillator
	VCP	Shift Clock Output for Vertical Drive
	VCTLD	Video Control
	VCTRL	Voltage Charge Control
	VD	Vertical Drive Pulse

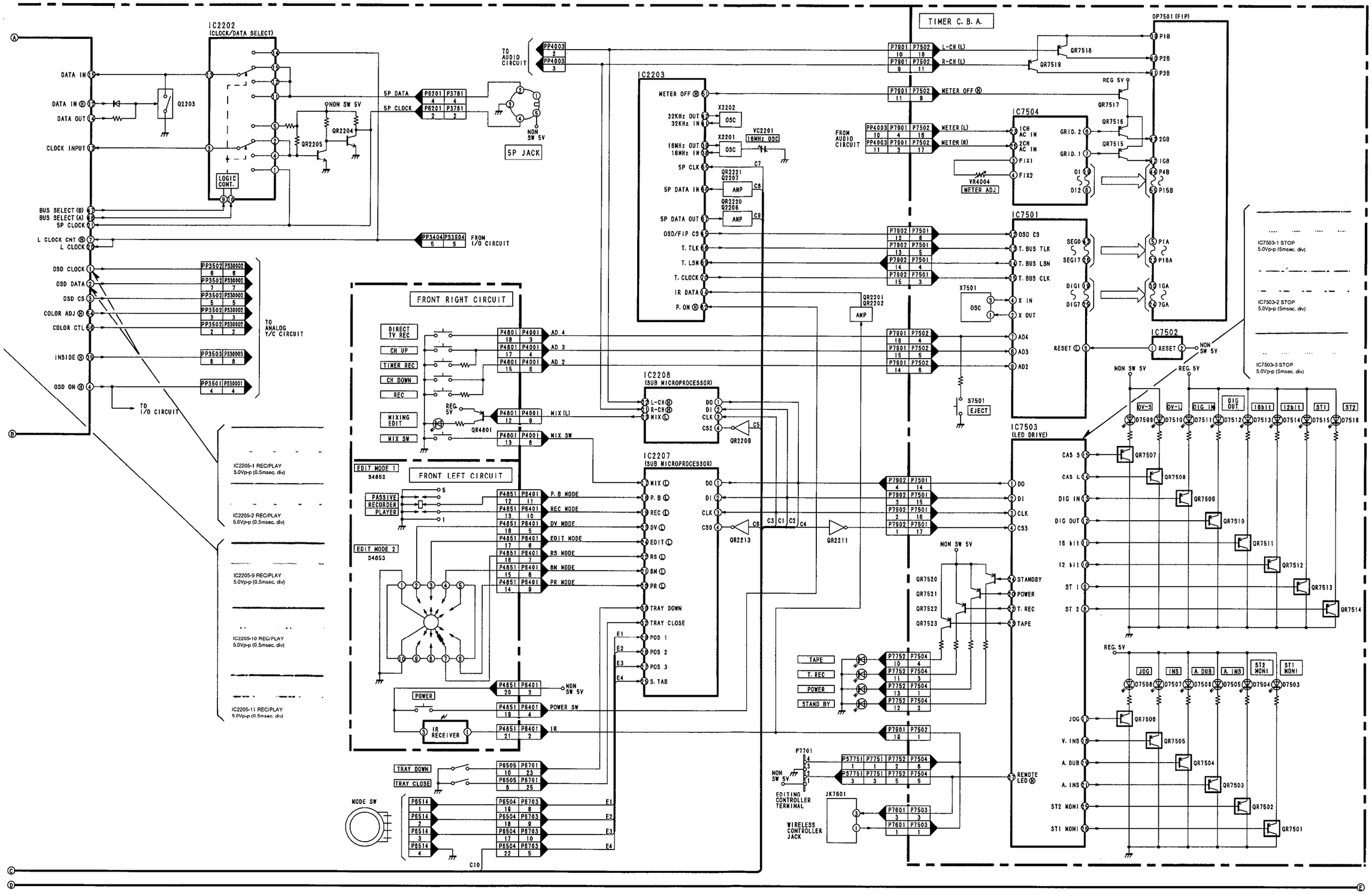
	INITIAL/LOGO	ABBREVIATIONS
	VDDX	X Drive Power for Colour LCD
	VDDXY	XY Drive Power for Colour LCD
	VDDY	Y Drive Power for Colour LCD
	VDREC	Video Delayed Rec
	Vgg	Voltage for Gate IC
	Vgl	Gate off Voltage
	VID	Video Signal Out
	VIN	Video In
	VITC	Vertical Interval Time Code
	VITERBI	One of Signal Detection Method
	VL	Low Voltage
	VLC	Variable Length Cording
	VLOCKP	Artificial Sync Pulse
	VLP	Artificial Sync Pulse
	VM	Motor Voltage
	VMD	Velocity Mode Data
	VMD1-3	Electric Shutter Mode
	VMODE	NTSC/PAL Select Switch
	VMVH	VH Filter Switching
	VORP	Video Overlap
	VRB	Voltage Refference Bottom
	VRBS	Voltage Refference Bottom Output
	VREFH	Refference Voltage High Side
	VREFL	Refference Voltage Low Side
	VRI	Refference Voltage Input
	VRO	Refference Voltage Output
	VRT	Voltage Refference Top
	VRTS	Voltage Refference Top Output
	VS	Switching Comparator
	VSS	Vertical Sync Signal
W	W/N	Mode Select for Window Mode
	W/N	Wide / Normal
	WAD	Write Address Enable
	WAE	Write Address Enable
	WAERAE	Write Address Enable
	WARI	Interrupt
	WB	White Balance
	WE	Write Enable
	WEM	Memory Write Enable
	WSB	B AGC Control
	WSR	R AGC Control
	WTV	Wide TV
X	X IN	Oscillator Input
	X OUT	Oscillator Output
	XP	FG Logic Reset
Y	Y FM0-7	Y Field Memory 0-7
	YCE	Cylinder Error Code
	YGC	Y Gain Control
	YMO 0-7	Y Field Memory 0-7
	YNCST	Noize Canceller
	YNR	Luminance Noise Reduction
	YSDP 0-7	Digital Y Out 0-7

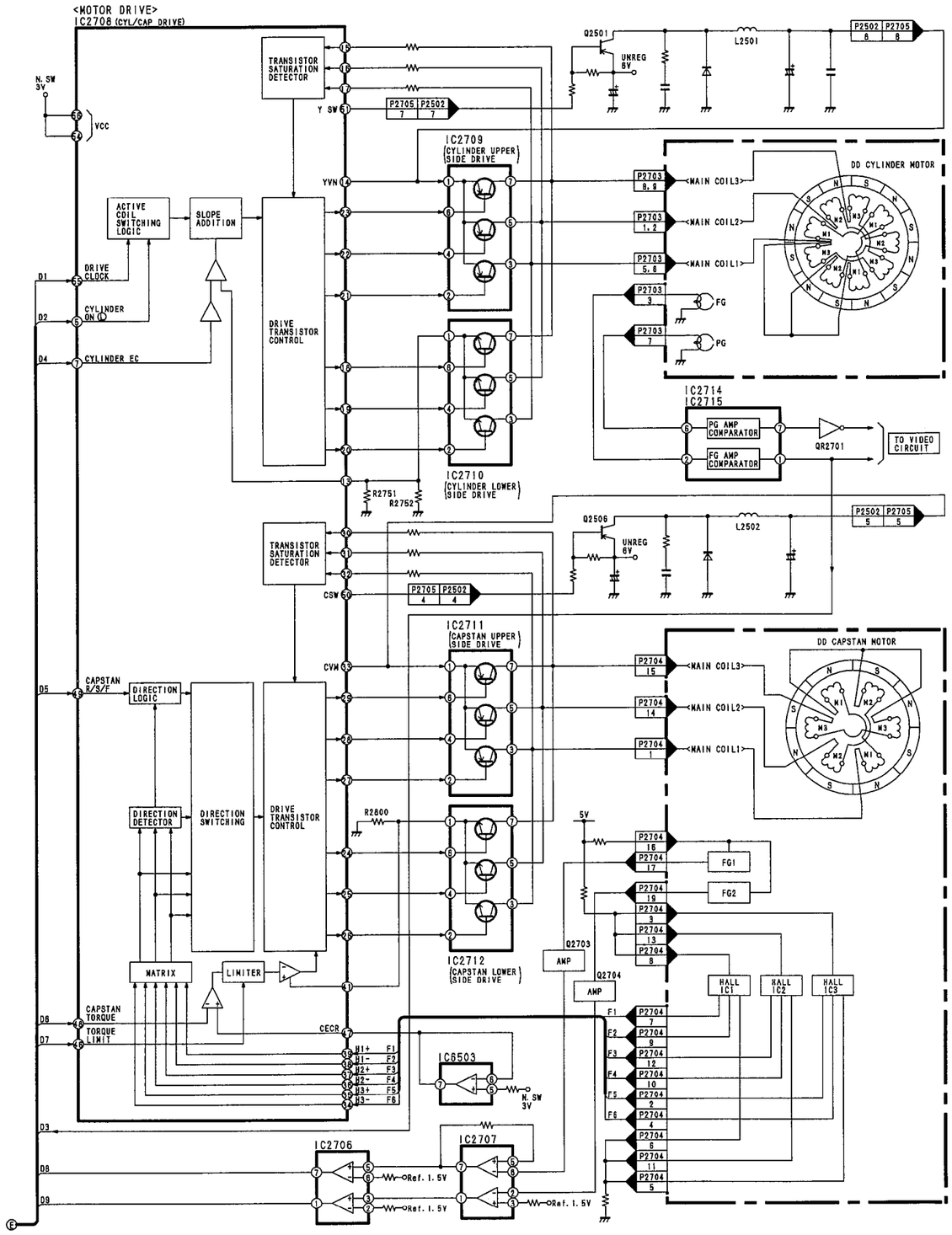
3-2. OVERALL BLOCK DIAGRAM



3-3. SYSTEM CONTROL & SERVO BLOCK DIAGRAM

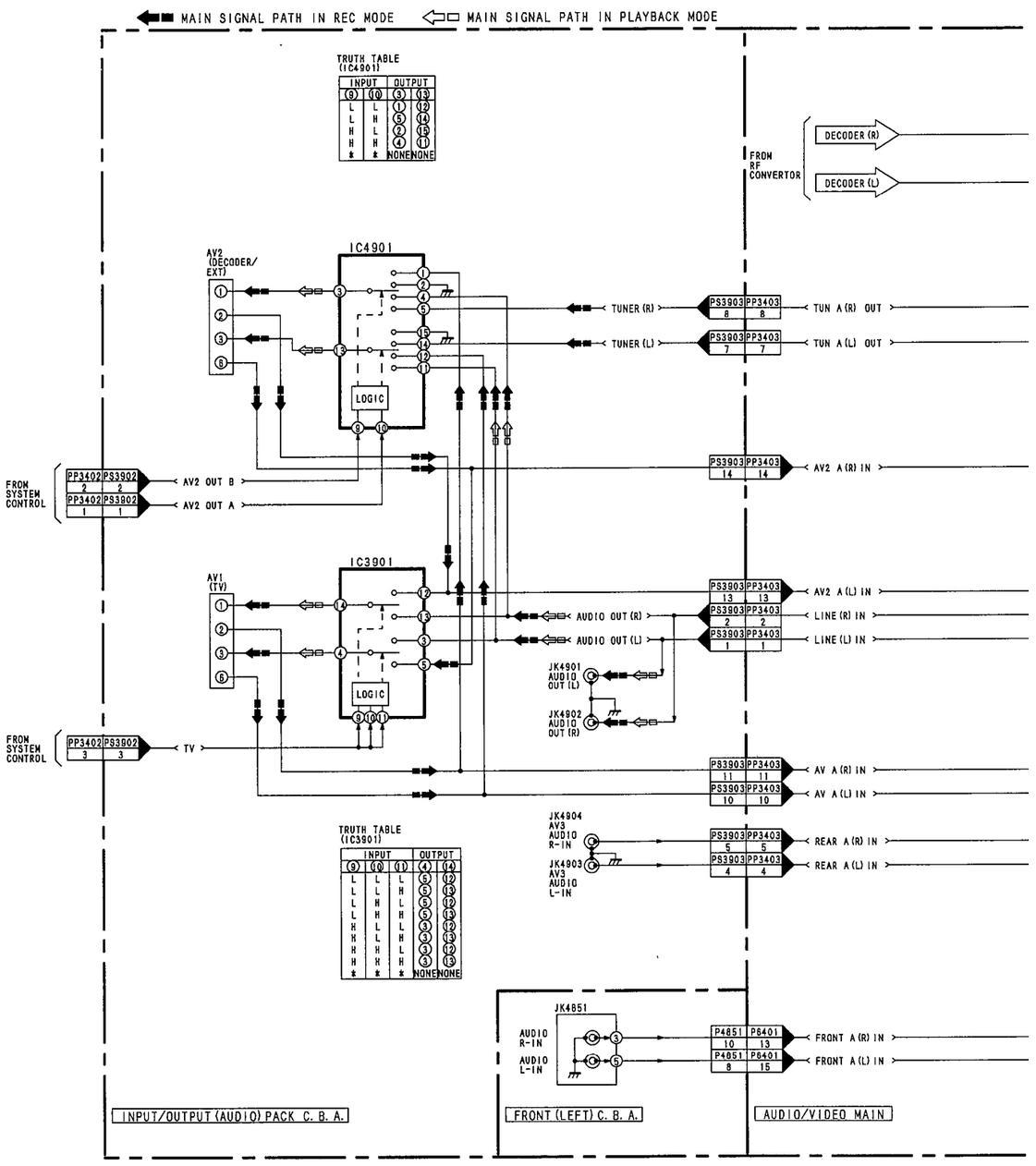



IC2202
(CLOCK/DATA SELECT)
DATA IN
DATA IN
DATA OUT
CLOCK INPUT
Q2203
LOGIC CONT.
QR2205
QR2204
NON SW 5V
5P DATA
5P CLOCK
NON SW 5V
5P JACK
BUS SELECT (B)
BUS SELECT (A)
5P CLOCK
L CLOCK CNT
L CLOCK
FROM I/O CIRCUIT
OSD CLOCK
OSD DATA
OSD CS
COLOR ADJ
COLOR CTL
INSIDE
OSD ON
TO ANALOG Y/C CIRCUIT
TO I/O CIRCUIT
TO AUDIO CIRCUIT
IC2203
METER OFF
X2202
32KHz OUT
32KHz IN
OSC
X2201
16MHz OUT
16MHz IN
VC2201
16MHz OSC
5P CLK
5P DATA IN
5P DATA OUT
QR2221
Q2207
QR2220
Q2206
AMP
OSD/FIP CS
T. TLK
T. LSN
T. CLOCK
IR DATA
P. ON
QR2201
QR2202
AMP
TIMER C. B. A.
L-CH (L)
R-CH (L)
METER OFF (R)
METER (L)
METER (R)
FROM AUDIO CIRCUIT
VR4004
METER ADJ
IC7504
1CH AC IN
2CH AC IN
FIX1
FIX2
GRID. 2
GRID. 1
QR7518
QR7519
QR7517
QR7516
QR7515
DP7501 (FIP)
REG 5V
IC7501
OSD CS
T. BUS TLK
T. BUS LSN
T. BUS CLK
X7501
OSC
X IN
X OUT
AD4
AD3
AD2
SEG0
SEG17
DIG1
DIG7
IC7502
RESET
NON SW 5V
S7501
EJECT
IC7503-1 STOP 5.0Vp-p (5msec. div)
IC7503-2 STOP 5.0Vp-p (5msec. div)
IC7503-3 STOP 5.0Vp-p (5msec. div)
FRONT RIGHT CIRCUIT
DIRECT TV REC
CH UP
TIMER REC
CH DOWN
REC
MIXING EDIT
MIX SW
REG. 5V
QR4801
AD 4
AD 3
AD 2
MIX (L)
MIX SW
IC2208
(SUB MICROPROCESSOR)
L-CH
R-CH
MIX
DO
DI
CLK
CS2
QR2209
C5
IC2207
(SUB MICROPROCESSOR)
EDIT MODE 1
S4852
FRONT LEFT CIRCUIT
PASSIVE RECORDER PLAYER
EDIT MODE 2
S4853
P. B MODE
REC MODE
DV MODE
EDIT MODE
RS MODE
8M MODE
PR MODE
MIX
P. B
REC
DV
EDIT
RS
8M
PR
TRAY DOWN
TRAY CLOSE
POS 1
POS 2
POS 3
S. TAB
E1
E2
E3
E4
C3
C1
C2
C4
C6
QR2213
QR2211
POWER
POWER SW
IR RECEIVER
IR
NON SW 5V
TRAY DOWN
TRAY CLOSE
KODE SW
C10
IC2205-1 REC/PLAY 5.0Vp-p (0.5msec. div)
IC2205-2 REC/PLAY 5.0Vp-p (0.5msec. div)
IC2205-9 REC/PLAY 5.0Vp-p (0.5msec. div)
IC2205-10 REC/PLAY 5.0Vp-p (0.5msec. div)
IC2205-11 REC/PLAY 5.0Vp-p (0.5msec. div)
TAPE
T. REC
POWER
STAND BY
QR7520
QR7521
QR7522
QR7523
NON SW 5V
STANDBY
POWER
T. REC
TAPE
REMOTE LED
P7701
NON SW 5V
EDITING CONTROLLER TERMINAL
WIRELESS CONTROLLER JACK
JK7501
IC7503
(LED DRIVE)
CAS S
CAS L
DIG IN
DIG OUT
16 bit
12 bit
ST 1
ST 2
QR7507
QR7508
QR7509
QR7510
QR7511
QR7512
QR7513
QR7514
REG. 5V
JOG
INS
A. DUB
A. INS
ST2 MONI
ST1 MONI
D7508
D7507
D7506
D7505
D7504
D7503
QR7506
QR7505
QR7504
QR7503
QR7502
QR7501
DV-S
DV-1
DIG IN
DIG OUT
16bit
12bit
ST1
ST2
D7509
D7510
D7511
D7512
D7513
D7514
D7515
D7516

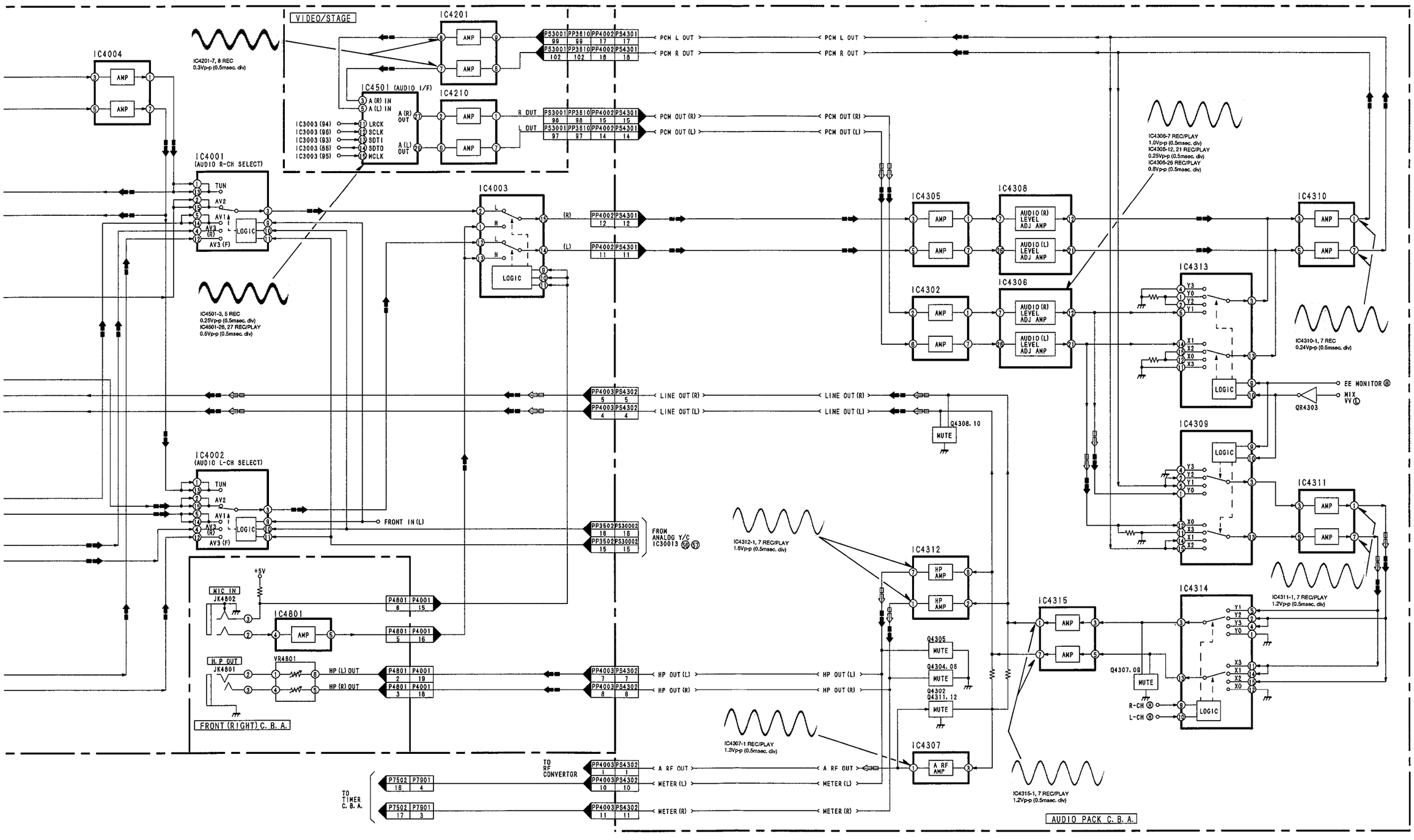


3—13

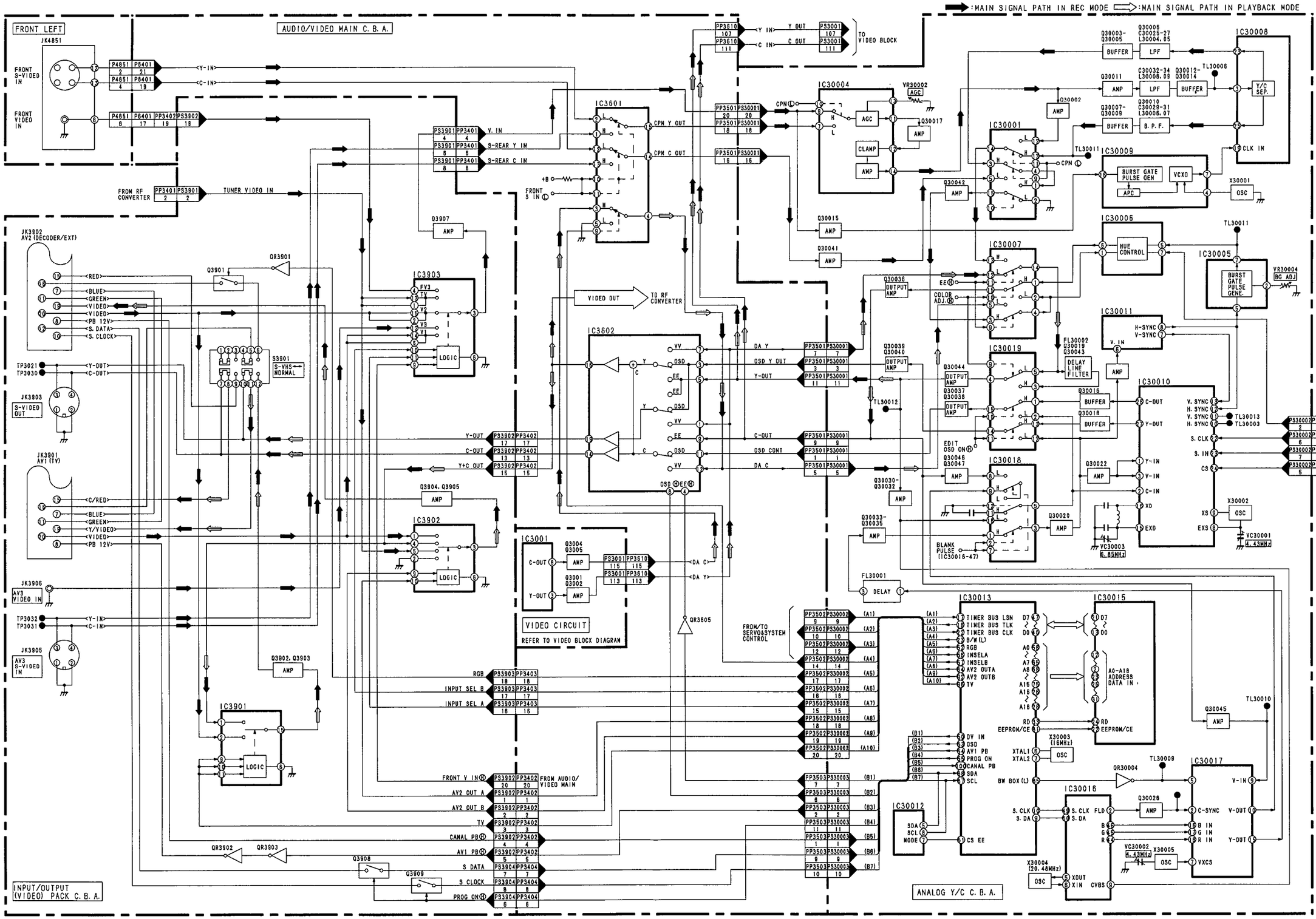
3-4. AUDIO BLOCK DIAGRAM



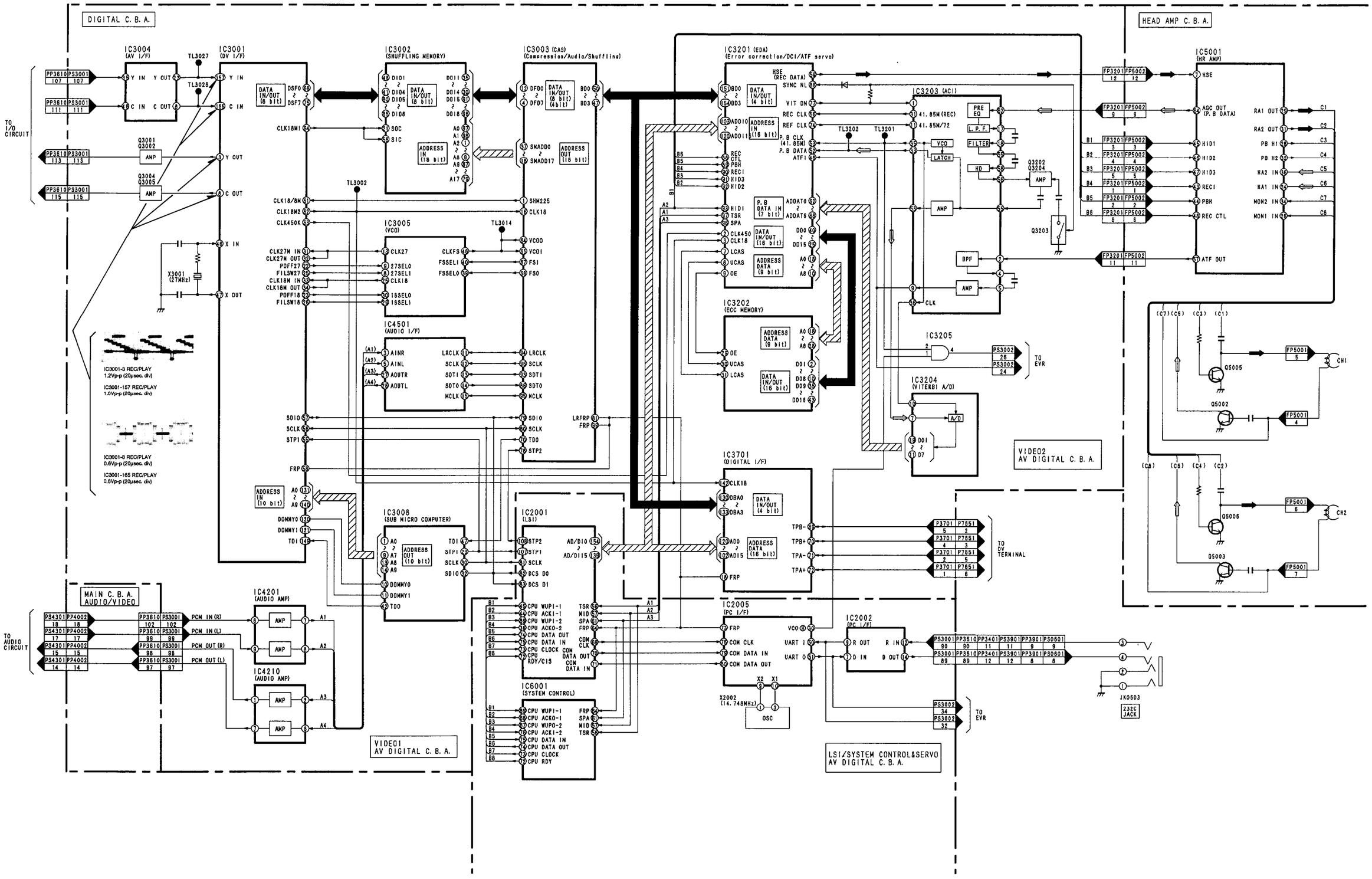
3—14


VIDEO/STAGE
IC4201
IC4210
IC4501 (AUDIO I/F)
IC4004
IC4001 (AUDIO R-CH SELECT)
IC4002 (AUDIO L-CH SELECT)
IC4003
IC4801
IC4305
IC4308
IC4302
IC4306
IC4310
IC4313
IC4309
IC4311
IC4312
IC4315
IC4314
IC4307
AMP
LOGIC
TUN
AV2
AV1
AV3 (R)
AV3 (F)
IC4201-7, 8 REC
0.3Vp-p (0.5msec. div)
IC4501-3, 5 REC
0.25Vp-p (0.5msec. div)
IC4601-26, 27 REC/PLAY
0.5Vp-p (0.5msec. div)
IC4306-7 REC/PLAY
1.0Vp-p (0.5msec. div)
IC4305-12, 21 REC/PLAY
0.25Vp-p (0.5msec. div)
IC4306-26 REC/PLAY
0.8Vp-p (0.5msec. div)
IC4310-1, 7 REC
0.24Vp-p (0.5msec. div)
IC4312-1, 7 REC/PLAY
1.6Vp-p (0.5msec. div)
IC4307-1 REC/PLAY
1.3Vp-p (0.5msec. div)
IC4311-1, 7 REC/PLAY
1.2Vp-p (0.5msec. div)
IC4315-1, 7 REC/PLAY
1.2Vp-p (0.5msec. div)
A (R) IN
A (L) IN
A (R) OUT
A (L) OUT
IC3003 (94) LRCK
IC3003 (96) SCLK
IC3003 (93) SDTI
IC3003 (86) SDTO
IC3003 (95) MCLK
R OUT
L OUT
PCM L OUT
PCM R OUT
PCM OUT (R)
PCM OUT (L)
(R)
(L)
LINE OUT (R)
LINE OUT (L)
FRONT IN (L)
FROM ANALOG Y/C IC30013
HP OUT (L)
HP OUT (R)
A RF OUT
METER (L)
METER (R)
TO RF CONVERTOR
TO TIMER C. B. A.
MIC IN JK4802
H. P OUT JK4801
VR4801
HP (L) OUT
HP (R) OUT
+5V
Q4308, 10
Q4305
Q4304, 06
Q4302
Q4311, 12
Q4307, 09
MUTE
HP AMP
A RF AMP
AUDIO (R) LEVEL ADJ AMP
AUDIO (L) LEVEL ADJ AMP
EE MONITOR
MIX
QR4303
R-CH
L-CH
FRONT (RIGHT) C. B. A.
AUDIO PACK C. B. A.

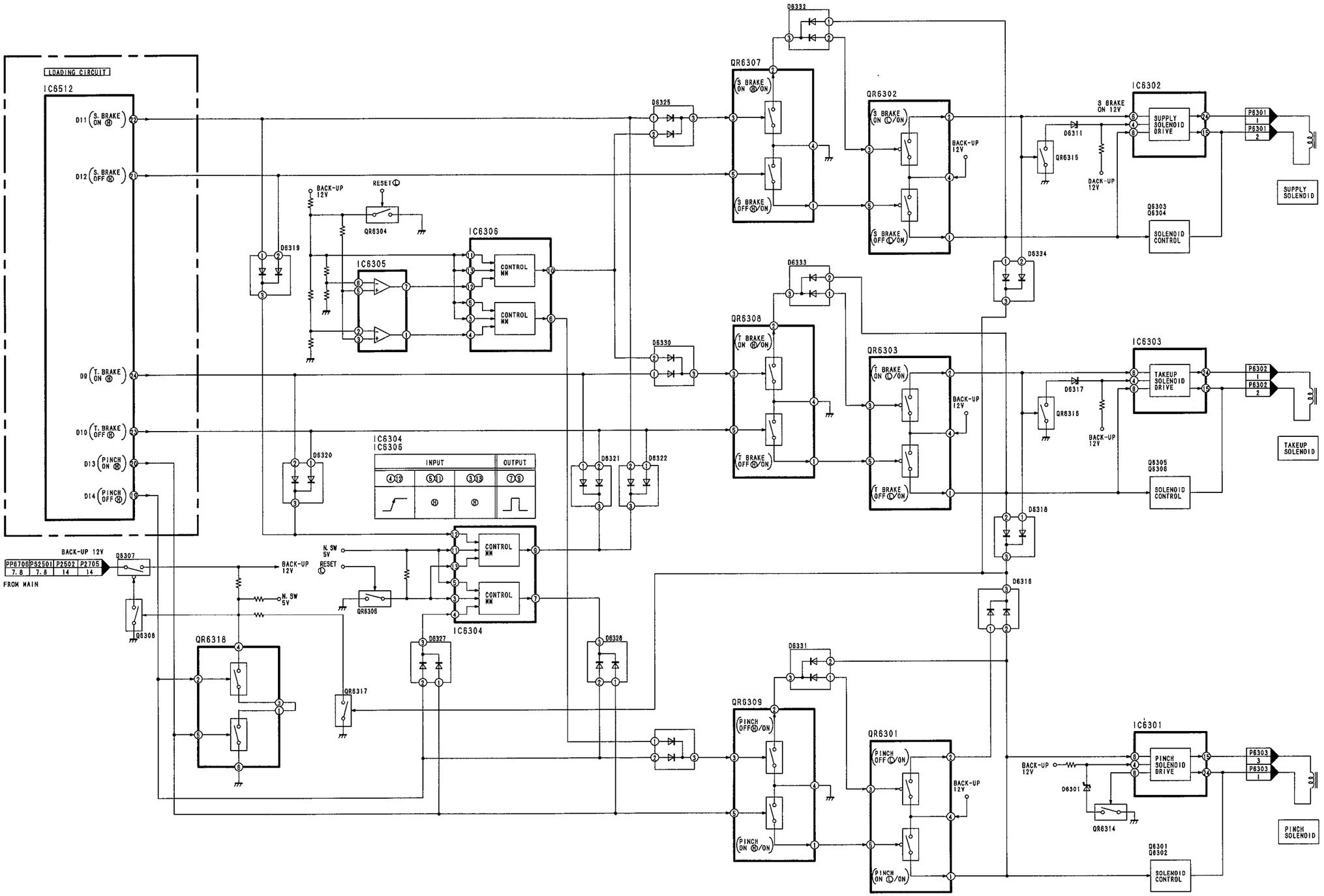
3-5. INPUT/OUTPUT BLOCK DIAGRAM



3-6. VIDEO BLOCK DIAGRAM

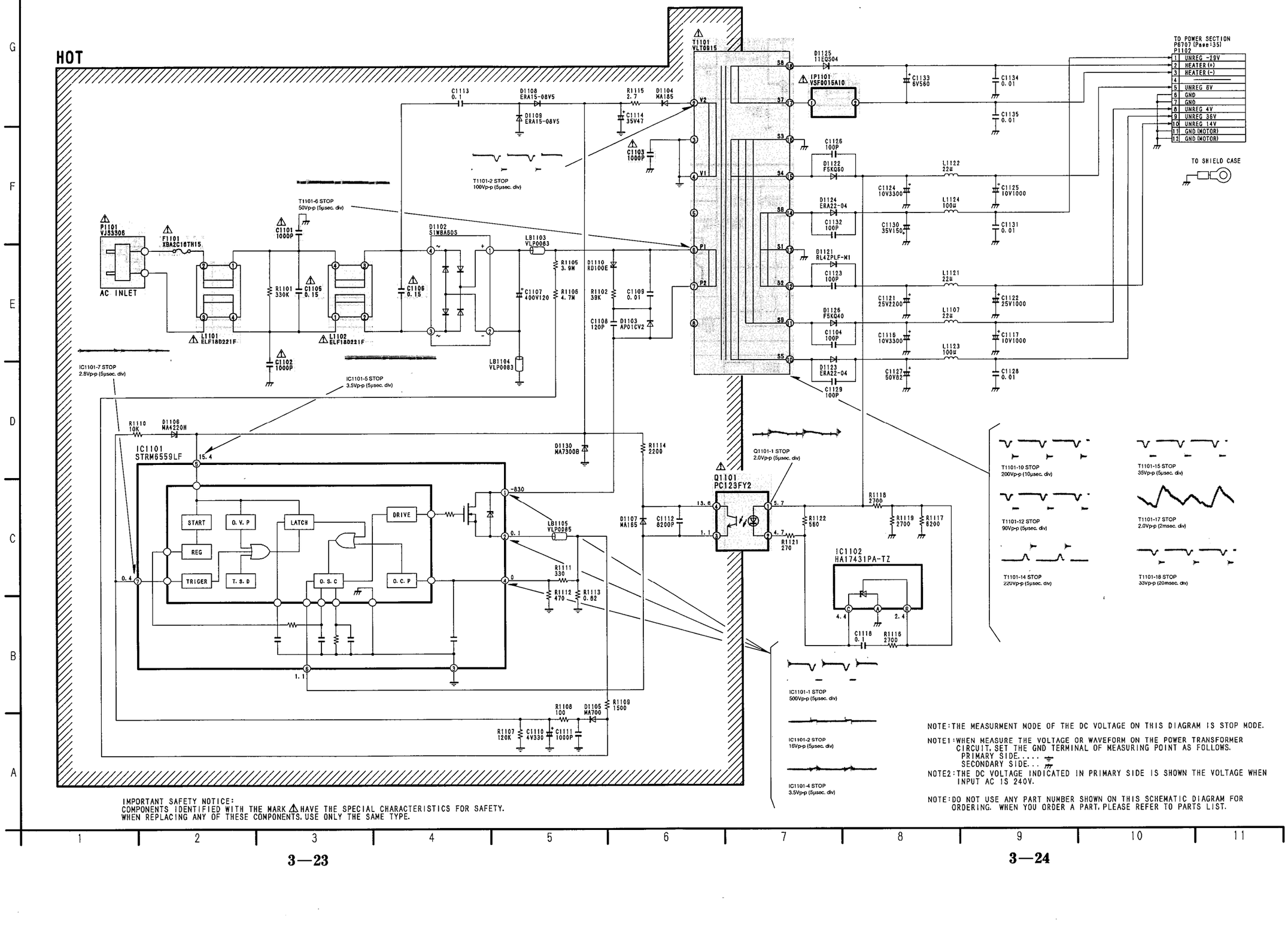


3-7. SOLENOID BLOCK DIAGRAM



3-8. POWER SUPPLY SCHEMATIC DIAGRAM

CAUTION THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.



IMPORTANT SAFETY NOTICE:
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WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

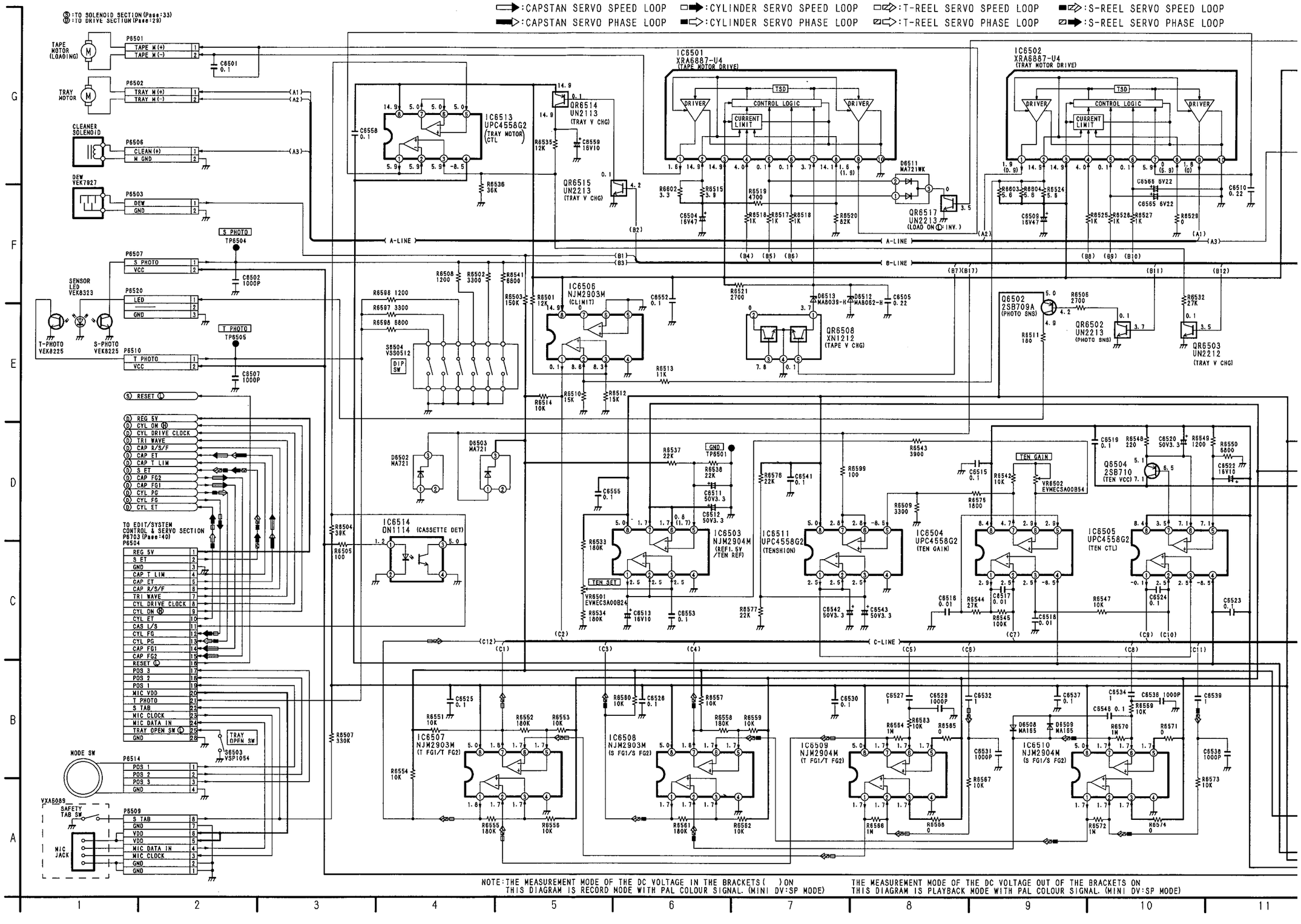
NOTE: THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE1: WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE..... ⏚
SECONDARY SIDE... ⏚

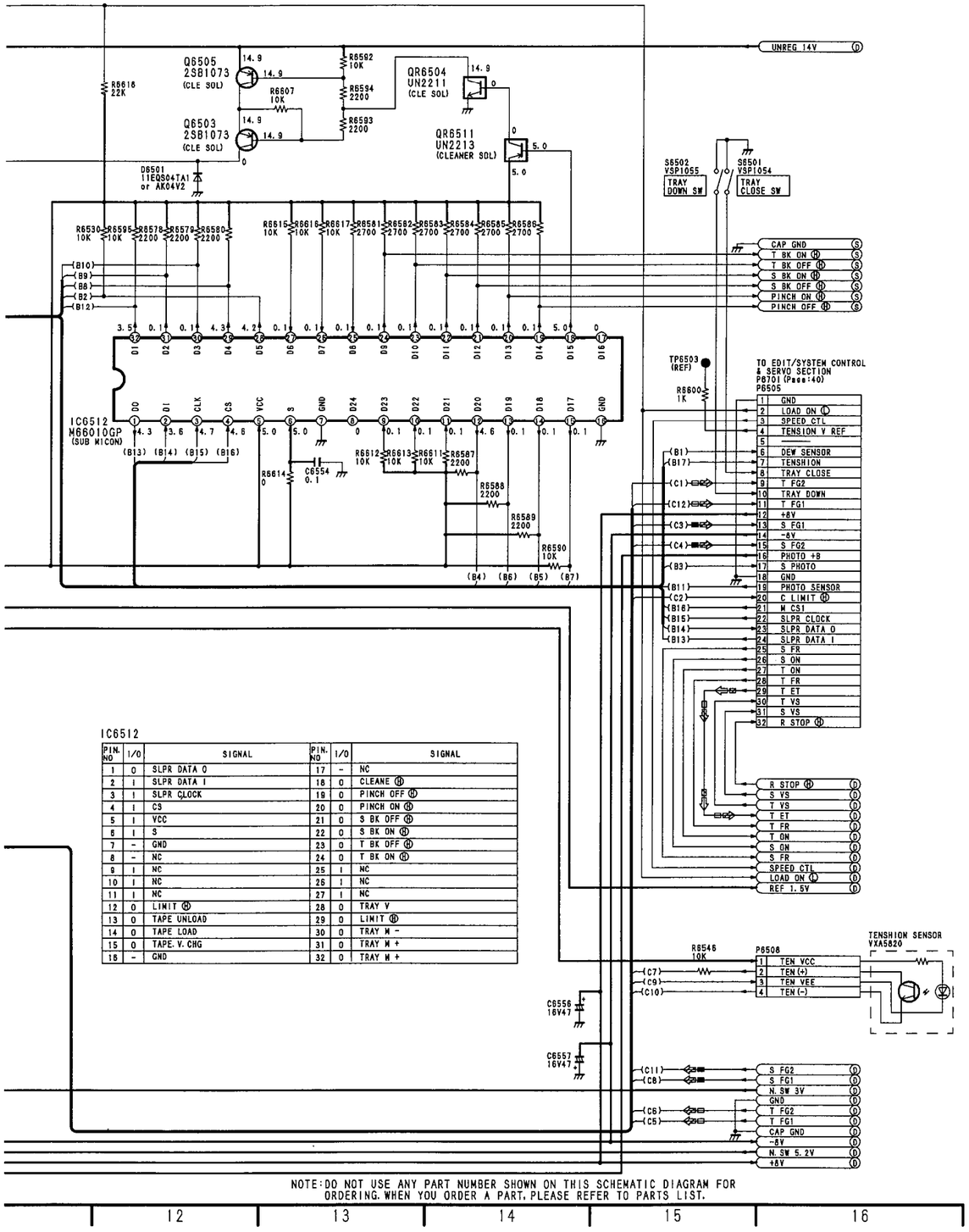
NOTE2: THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-9. LOADING SECTION IN MECHANISM DRIVE SCHEMATIC DIAGRAM



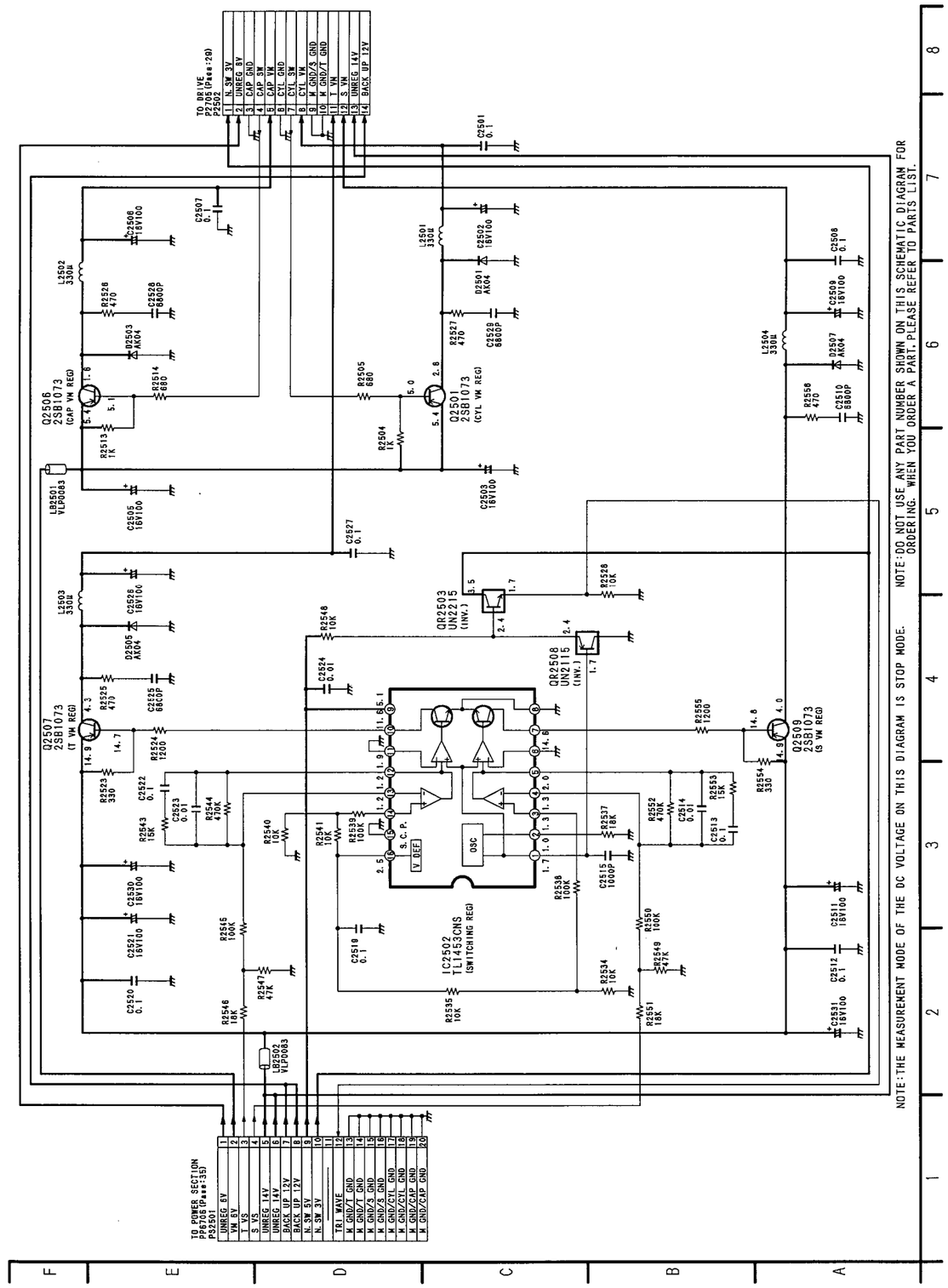
3-10. MOTOR DRIVE SCHEMATIC DIAGRAM



IC6512

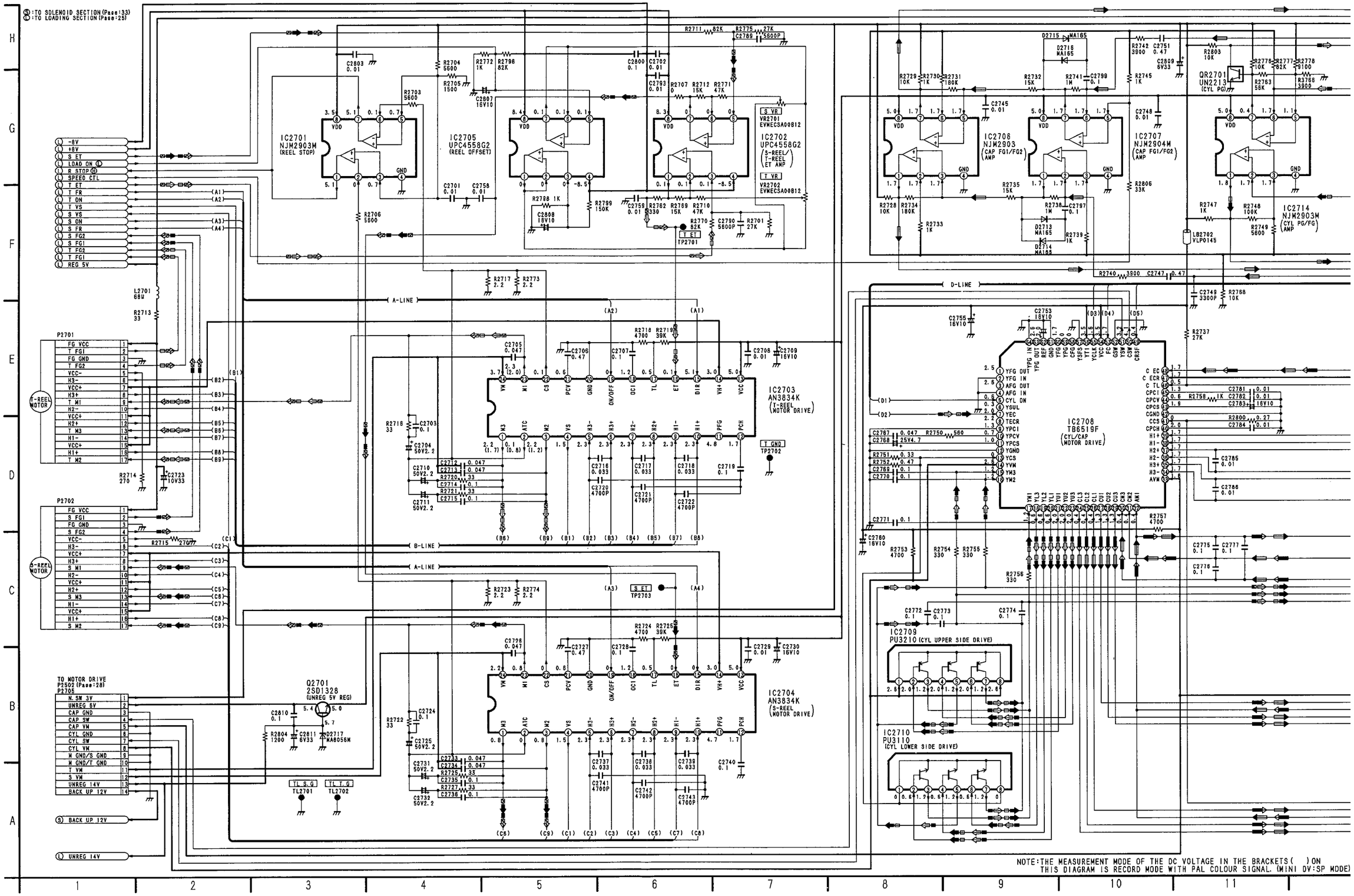
PIN NO	I/O	SIGNAL	PIN NO	I/O	SIGNAL
1	O	SLPR DATA O	17	-	NC
2	I	SLPR DATA I	18	O	CLEANE
3	I	SLPR CLOCK	19	O	PINCH OFF
4	I	CS	20	O	PINCH ON
5	I	VCC	21	O	S BK OFF
6	I	S	22	O	S BK ON
7	-	GND	23	O	T BK OFF
8	-	NC	24	O	T BK ON
9	I	NC	25	I	NC
10	I	NC	26	I	NC
11	I	NC	27	I	NC
12	O	LIMIT	28	O	TRAY V
13	O	TAPE UNLOAD	29	O	LIMIT
14	O	TAPE LOAD	30	O	TRAY M -
15	O	TAPE. V. CHG	31	O	TRAY M +
16	-	GND	32	O	TRAY M +

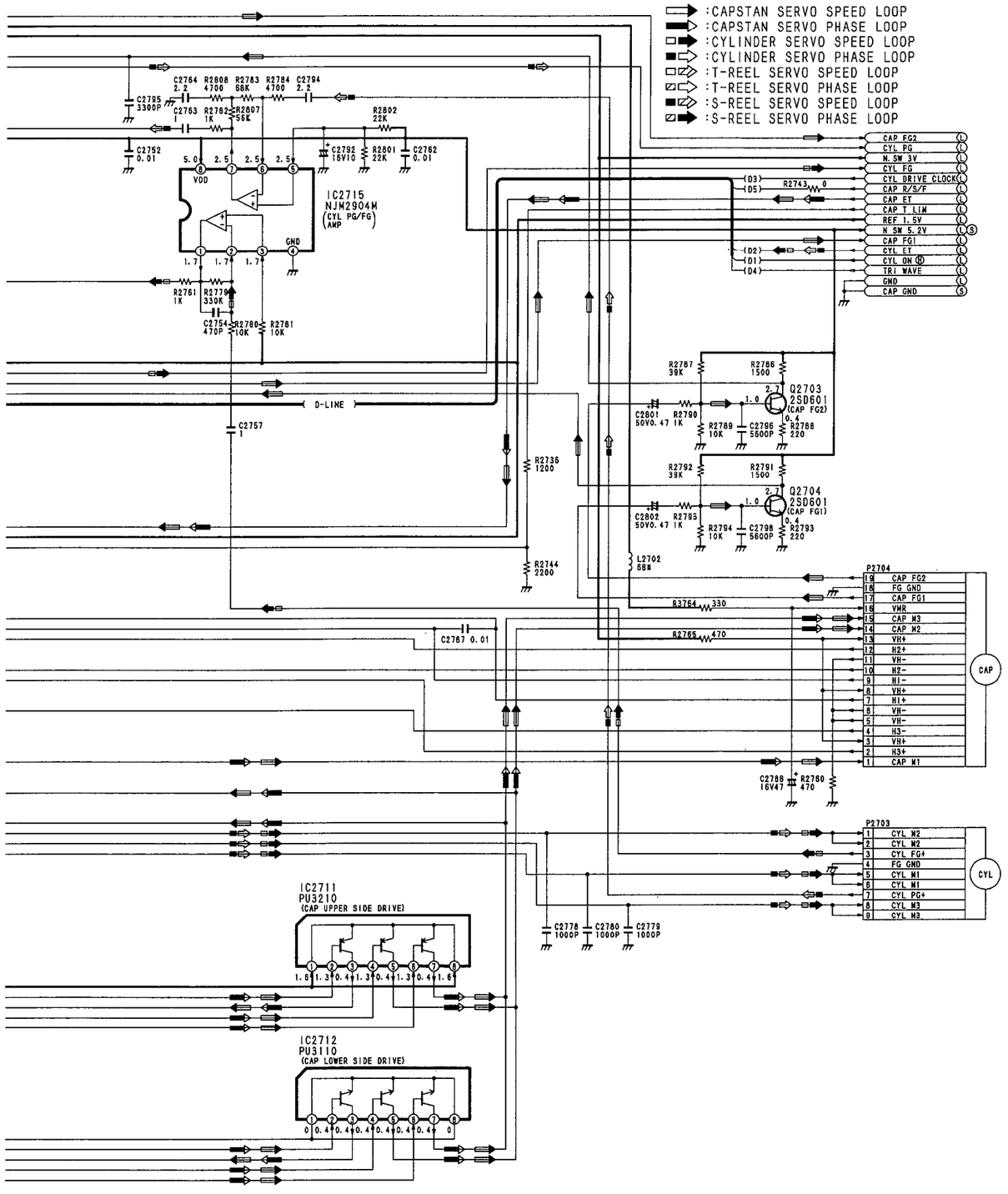
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-11. DRIVE SECTION IN MECHANISM DRIVE SCHEMATIC DIAGRAM

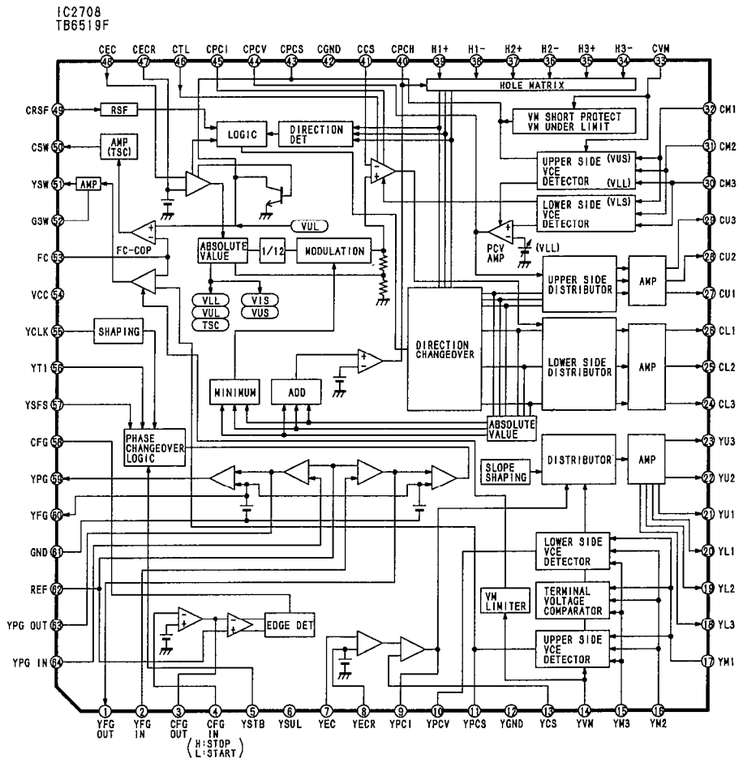


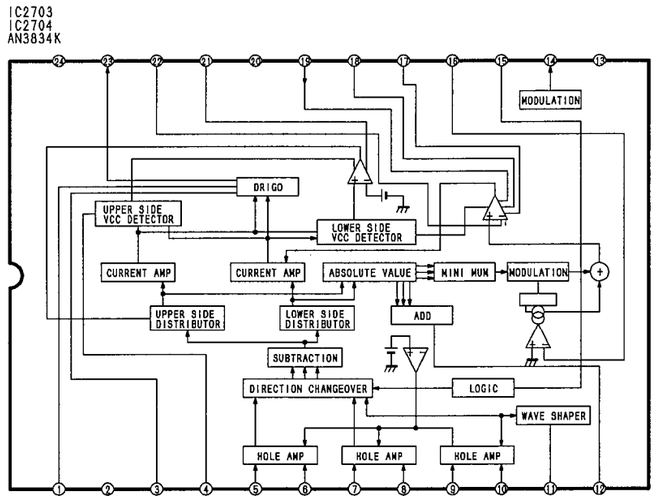


THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE)

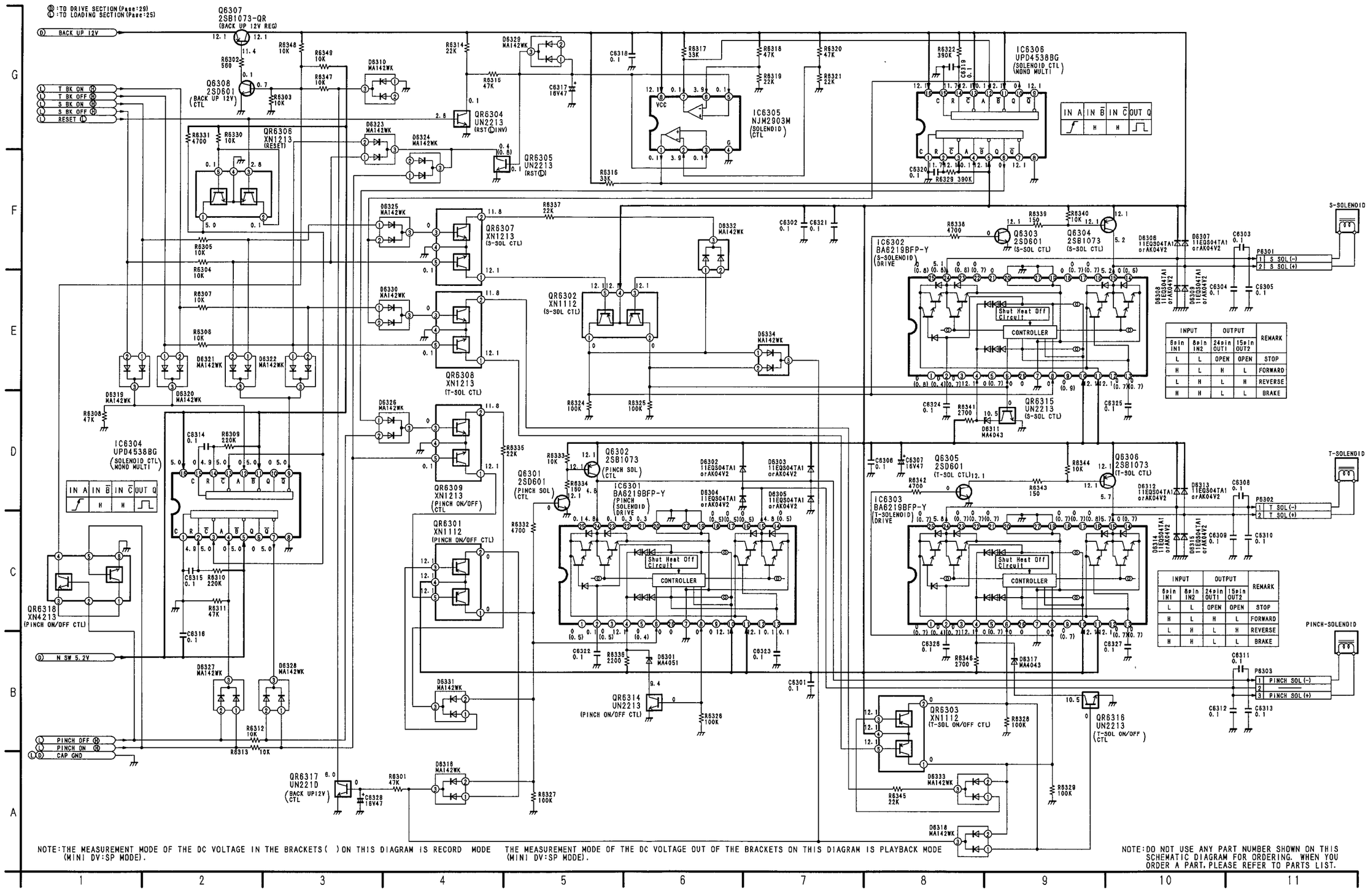
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

12 | 13 | 14 | 15 | 16 | 17

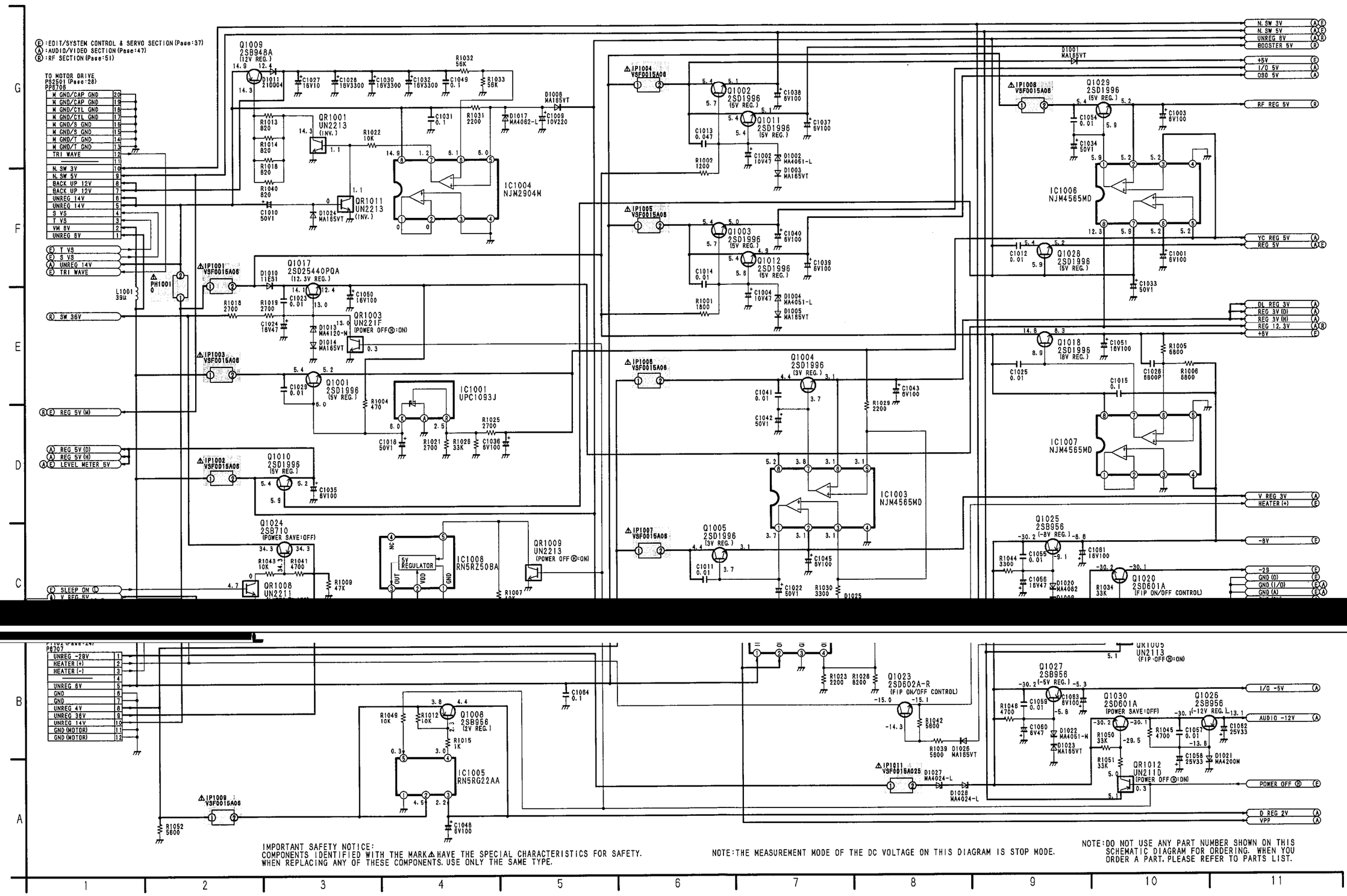




3-12. SOLENOID SECTION IN MECHANISM DRIVE SCHEMATIC DIAGRAM



3-13. POWER SECTION IN MAIN SCHEMATIC DIAGRAM



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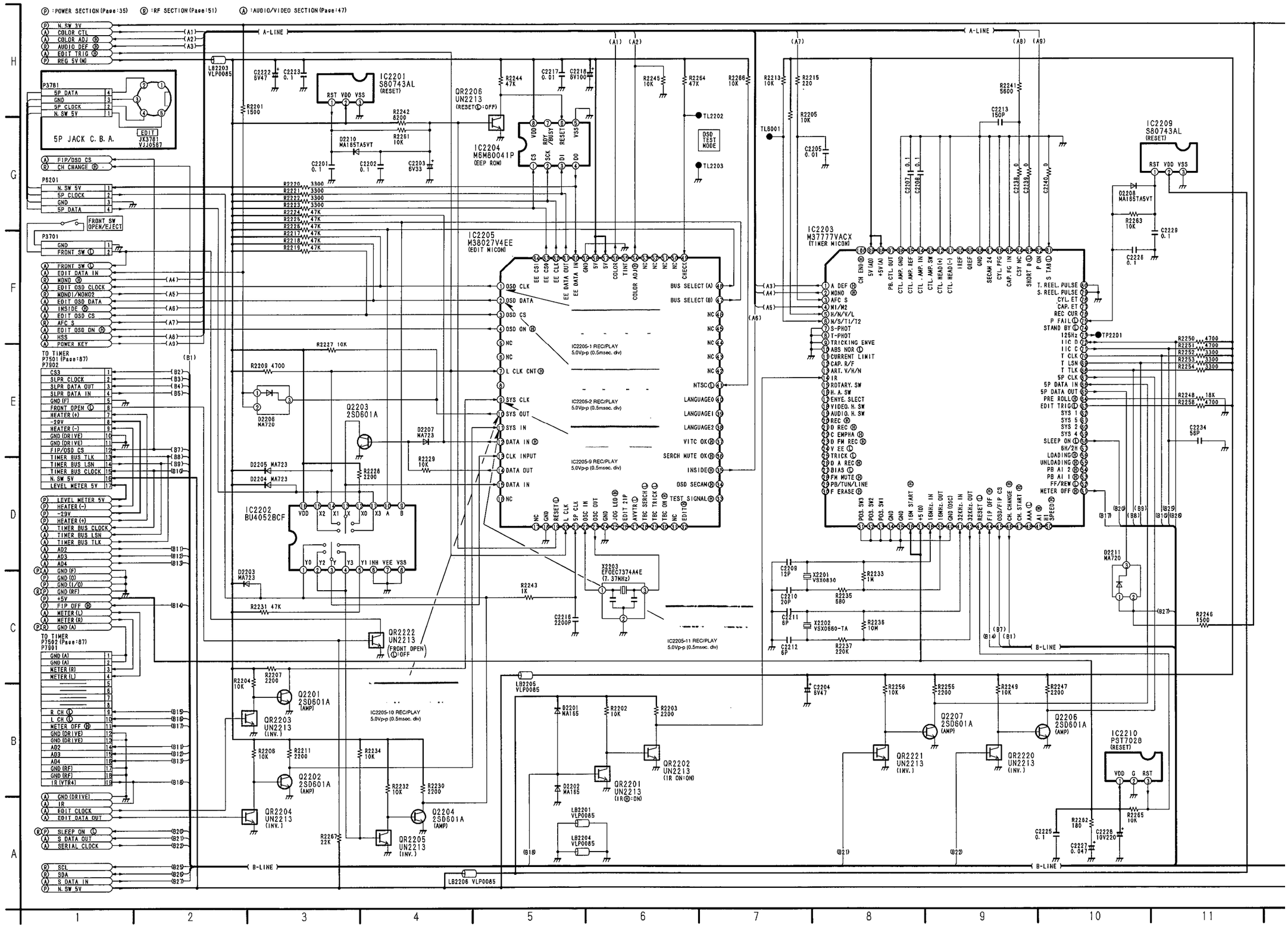
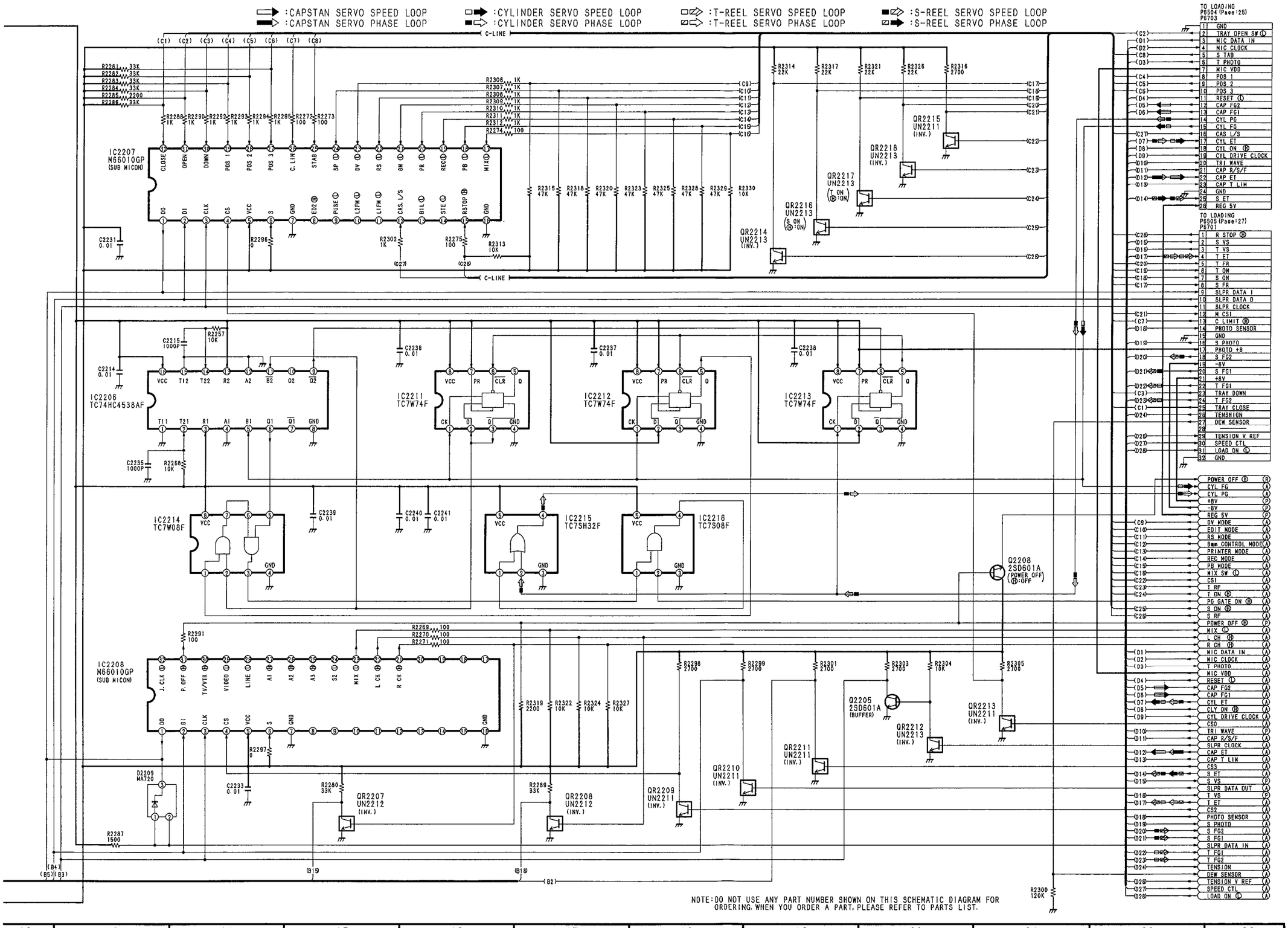
WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

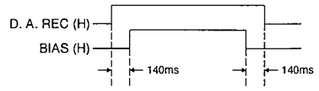
3-14. EDIT/SYSTEM CONTROL & SERVO SECTION IN MAIN, 5P JACK SCHEMATIC DIAGRAMS





12 13 14 15 16 17 18 19 20 21 22 23

IC2203 (M37777VACX): TIMER MICON

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
1	AUDIO. DEF Ⓗ	O	DECODER IC reset signal
2	FORCE MONI Ⓗ	O	U.K. Multi: Audio Detects Auto/off switch
3	AFC (S)	I	AFC S CURVE
4	No/M1/Bil/M2/Ste	I	Audio mode detection for display on the OSD INPUT VOLTAGE / DISPLAY MORE THAN 4.2V: NO DISPLAY 3.0～4.2: MONO1 2.0～3.0: BILINGUAL 0.8～2.0: MONO 1+2 LESS THAN 0.8V: STEREO
5	L6/U6/U4/U2/U2L	I	CYLINDER (HIFI/NORMAL) SELECT INPUT VOLTAGE / CYLINDER / HIFI/NORMAL MORE THAN 4.2V: LDD 6CH: HIFI 3.0～4.2: UDD 6CH: HIFI 2.0～3.0: UDD 2CH (NO LP): NORMAL 0.8～2.0: UDD 2CH (LP): NORMAL LESS THAN 0.8V: UDD 4CH: NORMAL
6	Nor/Ser/T1/T2	I	MODE SELECT INPUT VOLTAGE / MODE MORE THAN 4.0V: NORMAL 2.5～4.0: SERVICE 1.0～2.5: TEST 2 LESS THAN 1.0V: TEST 1
7	S-PHOT	I	Tape Supply Photo Sensor Detect
8	T-PHOT	I	Tape Take-up Phote Sensor Detect
9	TRACKING ENVE	O	Auto Tracking/Video Enve Detect Input for CVC
10	ABS. NORM Ⓛ	I	Lower output level Detect of FM audio
11	CURRENT. LIMIT	O	
12	REC CUR	O	REC CURR CTL for REC AI (EE)/ Picture VR Value out for P.B. AI (VV)
13	ART. V/H/N	O	
14	REMOCON	I	REMOTE/DIGIRAL RINK INPUT
15	ROTARY. SW	O	ROTARY SW
16	H.A. SW	O	HEAD AMP SW
17	ENVE. SLECT	I	ENVELOPE SELECT
18	VIDEO. H. SW	O	VIDEO HEAD SW
19	AUDIO. H. SW	O	AUDIO HEAD SW
20	REC Ⓗ	O	REC/P.B Select of video/Audio Circuit REC Mode: H
21	D. REC Ⓗ	O	Video Rec Curr Timing (H. SW Sync.)
22	C. EMPHA Ⓗ	O	Video/FM Audio Rec. Curr Up (H. SW Sync)
23	D. FM. REC Ⓗ	O	FM Audio Rec Curr Timing (H. SW Sync.)
24	VIDEO. EE Ⓛ	O	Video EE/VV Select (H SW Sync.) EE: L, VV: H
25	TRICK Ⓛ	O	Trick Plag Mode Output Except Std tape run in VV: L
26	D.A. REC Ⓗ	O	Linear Audio Rec Timingh H Output at timing of BIAS (H) At begining of REC, Set BIAS (H) at 140msec. later of D.A. REC (H) set. At end of REC, release BIAS (H) at 140msec. former of D.A. REC (H) reset 
27	BIAS Ⓛ	O	Linear Audio BIAS OSC SW At Linear Audio Rec, H/L output at timing of D.A. REC (H)
28	FM. MUTE Ⓗ	O	Audio Mute Output Power off, Head cleaning, Timer stand-by, VPS/PDC stand-by: H In VV mode, Except std tape run: H Former and later at EE/VV switch
29	PB/TUN/LINE	O	Normal Audio Circuit Select Normal Audio P.B: H Normal Audio Rec/LINE mode: L Normal Audio Rec/TUNER mode: M
30	FULL. ERASE Ⓗ	O	FE Head OSC SW
31	POS. SW3	I	Mechanical Position Input
32	POS. SW2	I	
33	POS. SW1	I	
34	GND	—	—
35	GND	—	—
36	16M. START Ⓗ	I	16 MHz START Hight
37	5V (D)	I	5V (D)
38	16MHz. IN	I	16 MHz IN
39	16MHz. OUT	O	16 MHz OUT
40	GND (OSC)	I	—
41	32KHz. IN	O	32 kHz IN
42	32KHZ. OUT	I	32 kHz OUT
43	RESET Ⓛ	O	RESET Ⓛ
44	FIP Ⓛ	I	FIP On/Off Select
45	FIP/OSD CS	O	FIP Driver/OSD Micon chip Select At Timing of Data transmission to FIP driver: L At Timing of Data transmission to OSD Micon: H
46	CH CHANGE Ⓗ	O	Varing edge output of channel (H)
47	CH START Ⓗ	O	Audio Carrier Auto Det start Edge output at Tuner preset
48	AAA OFF Ⓗ	O	Output during audio IC auto adj.
49	AI MES Ⓗ	O	Output during AI REC measurement (Fix carrier output)
50	HALF WAVE Ⓗ	O	Capstan Driver Full Wave/Half Wave select
51	P. OFF Ⓗ	O	Output during Power Off H: at Power off, Timer stand-by, etc L: at Head cleaning, Timer confirmation, VPS/PDC stand-by, ACS
52	FF/REW Ⓛ	O	CTL signal Filter/Switch at FF/RES
53	PB AI1 Ⓗ	O	PB AI CONTROL
54	PB AI2 Ⓗ	O	PB AI CONTROL
55	UNLOADING Ⓗ	O	LOADING MOTOR CONTROL
56	LOADING Ⓗ	O	

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
57	SP Ⓗ	O	TAPE RUN SPEED OUTPUT NTSC2H: H PAL3H: H
58	SLEEP Ⓛ	O	Super Power Save Mode Set Output (L)
59	PAL-I/BG/DK	O	Broadcast System Output for video circuit control
60	SECAM/PAL	O	Broadcast System Output for video circuit control
61	NTSC Ⓛ	O	Broadcast System Output for video circuit control
62	PAL/MESECAM	O	Broadcast System Output for video circuit control
63	EDITTRIG Ⓛ	I/O	Synchronizing Edit Control
64	PREROLL Ⓗ	I/O	
65	5P/T2. DATA. OUT	O	Edit 5P/Serial Communication for Test
66	5P/T2. DATA. IN	I	Edit 5P/Serial Communication for Test
67	5P/T2. CLOCK	O	Edit 5P/Serial Communication for Test
68	T-BUS/IC. OUT	O	OSD Micon/FIP Driver Serial Communication
69	T-BUS/IC. IN	I	OSD Micon/FIP Driver Serial Communication
70	T-BUS/IC. CLK	O	OSD Micon/FIP Driver Serial Communication
71	IIC. CLOCK	O	Tuner/FM Audio IC Serial Communication
72	IIC. DATA	I/O	Tuner/FM Audio IC Serial Communication
73	125Hz	O	Int. OSC Output for Main Clock Adj.
74	STANDBY Ⓛ	O	Display Output at VTR Stand-by
75	POWER FAIL Ⓛ	I	Power Stoppage Detect.
76	CAP. R/F	O	CAPSTAN REVERSE Ⓗ/FORWARD Ⓛ
77	CAP. ET	O	CAPSTAN ERROR TORQUE
78	CYL. ET	O	CYLINDER ERROR TORQUE
79	S. REEL. PULSE	I	Pulse Input from Real Sensor
80	T. REEL. PULSE	I	Pulse Input from Real Sensor
81	STAB Ⓛ	I	Safety Tab Detect Exist: L, Non: H
82	POWER KEY Ⓗ	I	Main Power ON/OFF Key Input
83	SHORT DN	I	OSC Trouble Detect of REC Mode
84	C SYNC	I	COLOR SYNC
85	CAP. FG	I	CAPSTAN FG
86	CYL. PFG	I	CYLINDER PG/FG
87	SECAM24 Ⓗ	I	26μ/24μ Head Select Input H: 24μ
88	GND	—	—
89	OREF	O	REFERENCE OUT
90	IREF	I	REFERENCE IN
91	CTL. HEAD (–)	I	CONTROL HEAD (–)
92	CTL. HEAD (+)	I	CONTROL HEAD (+)
93	CTL. AMP. SW	O	CONTROL AMP. SW
94	CTL. AMP. IN	I	CONTROL AMP. IN
95	CTL. AMP. REF	I	CONTROL AMP. REFERENCE
96	CTL. AMP. GND	—	CONTROL AMP. GND
97	PB. CTL. OUT	O	PLAYBACK CONTROL OUT
98	5V (A)	I	5V (A)
99	5V (AD)	I	5V (AD)
100	CH END Ⓗ	I	Audio Carrier Auto Detect Completion Input at Tuner Preset

IC2205 (M38027V4EE): EDIT MICON

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
1	P62	O	OSD CLK
2	P61	O	OSD DATA
3	P60	O	OSD CS
4	P57/INT3	O	OSD ON Ⓗ
5	P56/PWM	O	NC
6	P55/CNTR1	O	NC
7	P54/CNTR0	I	L CLK CNT Ⓗ
8	P53/Srdy2	O	NC
9	P52/SCLK2	I	SYS CLK
10	P51/SOUT2	O	SYS OUT
11	P50/SIN2	I	SYS IN
12	P47/Srdy1	O	DATA INH
13	P46/CLK1	I	CLK INPUT
14	P45/TXD	O	DATA OUT
15	P44/RXD	I	DATA IN
16	P43/INT2	O	NC
17	P42/INT1	O	NC
18	CNVss	—	GND
19	RESET	—	RESET Ⓛ
20	P41/INT0	I	L CLK
21	P40/INT4	I	5P CLK
22	Xin	—	OSC IN
23	Xout	—	OSC OUT
24	Vss	—	GND
25	P27	O	NC (JOG LED Ⓗ)
26	P26	O	NC (EDIT21P)
27	P25	O	NC (AVVTR Ⓛ)
28	P24	O	NC (TBC SERCH Ⓛ)
29	P23	O	NC (TBC TRICK Ⓛ)
30	P22	O	NC (TBC ON)
31	P21	O	NC
32	P20	O	NC (EDIT Ⓗ)
33	P17/AD15	O	NC
34	P16/AD14	O	NC
35	P15/AD13	O	INSIDE Ⓗ
36	P14/AD12	O	NC
37	P13/AD11	O	NC
38	P12/AD10	O	NC
39	P11/AD9	O	NC
40	P10/AD8	O	NC
41	P07/AD7	I	NTSC Ⓛ/PAL Ⓗ
42	P06/AD6	O	NC
43	P05/AD5	O	NC
44	P04/AD4	O	NC
45	P03/AD3	O	NC
46	P02/AD2	O	NC
47	P01/AD1	O	BUS SELECT (B)
48	P00/AD0	O	BUS SELECT (A)
49	P37	I	CHECK Ⓛ
50	P36	O	NC
51	P35	O	NC
52	P34	O	NC
53	P33	O	NC
54	P32	O	COLOR ADJ Ⓗ
55	P31/DA2	I	TINT
56	P30/DA1	I	COLOR
57	Vcc	—	5V
58	Vref	—	5V
59	AVss	—	GND
60	P67	I	EE DATA IN
61	P66	O	EE DATA OUT
62	P65	O	EE CLK
63	P64	O	EE CS0
64	P63	I	NC

IC2207 (M66010GP): SUB MICON

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION	PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
1	DO	O	Serial Data Output	17	MIX Ⓛ	I	Audio Mixing Ⓛ
2	DI	I	Serial Data Input	18	PB Ⓛ	I	PLAY BACK Ⓛ
3	CLK	I	Serial clock	19	REC Ⓛ	I	REC Ⓛ
4	CS	I	Chip select	20	PR Ⓛ	I	Preroll Connect Ⓛ
5	VCC	I	VCC	21	8M Ⓛ	I	8mm Connect Ⓛ
6	$\overline{S}$	I	Power ON Ⓛ	22	RS Ⓛ	I	RS232C Connect Ⓛ
7	GND	—	—	23	DV Ⓛ	I	DV Terminal Connect Ⓛ
8	ED2 Ⓗ	I	TV Ⓗ	24	5P Ⓛ	I	5P Terminal Connect Ⓛ
9	MUSE Ⓛ	I	Muse Ⓛ	25	S TAB Ⓛ	I	Safety Tab SW
10	L2FM Ⓛ	I	L2 Full Mode Ⓛ	26	C LIM	I	CURR. Limit
11	L1FM Ⓛ	I	L1 Full Mode Ⓛ	27	P03	I	Position SW3
12	CAS L/S	I	Cassette Detect L cassette Ⓗ/S cassette Ⓛ	28	P02	I	Position SW2
13	BIL Ⓛ	I	Bilingual Ⓛ	29	P01	I	Position SW1
14	STE Ⓛ	I	Stereo Ⓛ	30	DOWN	I	Tray Down Ⓛ
15	RSTOP Ⓛ	I	Reel Driver desfruction detect Input	31	OPEN	I	Tray Open Ⓛ
16	GND	—		32	CLOSE	I	Tray Close Ⓛ

IC2208 (M66010GP): SUB MICON

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION	PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
1	DO	O	Serial Data Output	17	NC	—	—
2	DI	I	Serial Data Input	18	NC	—	—
3	CLK	I	Serial Data Clock	19	NC	—	—
4	CS	I	Chip Select	20	NC	—	—
5	VCC	I	VCC	21	RCH Ⓗ	O	R CH Ⓗ
6	$\overline{S}$	I	Power On Ⓛ	22	LCH Ⓗ	O	L CH Ⓗ
7	GND	—	—	23	MIX Ⓛ	O	Mix Ⓛ
8	NC	—	—	24	S2 Ⓛ	O	S Output Terminal widefull Ⓛ
9	NC	—	—	25	A3 Ⓗ	O	Input Select Ⓗ
10	NC	—	—	26	A2 Ⓗ	O	Input Select Ⓗ
11	NC	—	—	27	A1 Ⓗ	O	Input Select Ⓗ
12	NC	—	—	28	LINE Ⓛ	O	Line Input Select Ⓛ
13	NC	—	—	29	WIDE Ⓛ	O	S Output Terminal widefull Ⓛ
14	NC	—	—	30	TV/VTR Ⓗ	O	TV/VTR Ⓗ
15	NC	—	—	31	P OFF Ⓗ	O	Power off Ⓗ
16	GND	—	—	32	J CLK Ⓛ	O	Jast Clock Ⓛ

EDIT/SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (Mini DV : SP MODE)

REF. NO.	IC2201																			
MODE	1	2	3																	
STOP	4.9	5.0	0																	
PLAY	4.9	4.9	0																	
REC	4.9	5.0	0																	
F.F	4.9	4.9	0																	
REW	4.9	4.9	0																	
REF. NO.	IC2202																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	4.8	4.0	4.0	4.0	4.9	0	0	0	5.0	5.0	4.6	4.6	4.6	4.6	4.6	5.0				
PLAY	4.8	4.0	4.0	4.0	4.9	0	0	0	4.9	4.9	4.6	4.6	4.6	4.9	4.6	4.9				
REC	4.8	4.0	4.0	4.0	4.9	0	0	0	5.0	5.0	4.6	4.6	4.6	4.9	4.6	5.0				
F.F	4.8	4.0	4.0	4.0	4.9	0	0	0	4.9	4.9	4.6	4.6	4.6	4.9	4.6	4.9				
REW	4.8	4.0	4.0	4.0	4.9	0	0	0	4.9	4.9	4.6	4.6	4.6	4.9	4.6	5.0				
REF. NO.	IC2203																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	2.7	5.0	5.0	4.9	0	0	0	0	0	1.6	4.7	5.1	0	0	0.2	0	0	0
PLAY	0	0	2.7	4.9	4.9	4.9	0	0	0	0	0	1.6	0	5.1	0	0	0.1	0	0	0
REC	0	0	0.1	5.0	4.9	4.9	0	0	0	0	0	1.6	5.0	5.1	0	0	0.2	0	0	0
F.F	0	0	2.8	4.9	4.9	4.9	0	0	0	0	0	1.6	4.7	5.1	0	0	0.2	0	0	0
REW	0	0	2.7	4.9	4.9	4.9	0	0	0	0	0	1.6	4.7	5.1	0	0	0.2	0	0	0
REF. NO.	IC2203																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	4.7	0	0	4.7	0	0	0	0	0	0	0	4.7	4.7	2.2	2.1	0
PLAY	0	0	0	0	4.7	0	0	4.7	0	0	0	0	0	0	0	4.7	4.7	2.2	2.1	0
REC	0	0	0	0	4.7	0	0	4.7	0	0	0	0	0	0	0	4.7	4.7	2.2	2.2	0
F.F	0	0	0	0	4.7	0	0	4.7	0	0	0	0	0	0	0	4.7	4.7	2.2	2.1	0
REW	0	0	0	0	4.7	0	0	4.7	0	0	0	0	0	0	0	4.7	4.7	2.2	2.1	0
REF. NO.	IC2203																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	1.3	1.3	4.7	0	2.4	0	0	0	0	0.5	0	4.7	0	0	0	0	4.7	4.7	0.4	0
PLAY	1.3	1.3	—	0	2.4	0	0	0	0	1.0	0	4.7	0	0	0	0	4.7	4.7	0.5	0
REC	1.3	1.3	—	0	2.3	0	0	0	0	0.3	0	4.7	0	0	0	0	4.7	4.7	0.5	0
F.F	1.3	1.3	1.3	—	2.4	0	0	0	0	0.2	0	4.7	0	0	0	0.2	4.7	4.7	0.2	0
REW	1.3	1.3	4.7	—	2.4	0	0	0	0	0.3	0	4.7	0	0	0	0	4.7	4.7	0.2	0
REF. NO.	IC2203																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	0	5.0	0	3.6	4.2	4.5	4.4	4.4	4.4	2.9	2.9	2.4	4.7	5.0	0	0	4.0	0	0
PLAY	0	0	5.0	0	3.6	4.2	4.6	4.4	4.4	4.4	2.9	2.9	2.3	4.7	5.0	0	0	3.9	0	0
REC	0	0	5.0	0	3.6	4.1	4.6	4.4	4.4	4.4	2.9	2.9	2.3	4.7	5.0	0	0	3.9	0	0
F.F	0	0	4.9	0	3.6	4.3	4.5	4.4	4.4	4.4	2.9	2.9	2.3	4.7	5.0	0	0	4.0	0	0
REW	0	0	4.9	0	3.6	4.1	4.5	4.4	4.4	1.2	2.9	2.9	2.3	4.7	5.0	0	0	4.0	0	0
REF. NO.	IC2203																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0	0	0	4.2	0	0	0	0	2.5	2.5	0	0	0	2.5	2.5	0	2.5	5.0	5.0	0.2
PLAY	0	0	0	4.2	0	0	0	0	2.5	2.5	0	0	0	2.5	2.5	0	2.5	4.9	4.9	0.6
REC	0	0	0	4.2	0	0	0	0	2.5	2.5	0	0	0	2.4	2.5	0	2.5	5.0	5.0	0.6
F.F	0	0	0	4.2	0	0	0	0	2.5	2.5	0	0	0	2.5	2.5	0	2.5	4.9	4.9	0.3
REW	0	0	0	4.2	0	0	0	0	2.5	2.5	0	0	0	2.5	2.5	0	2.5	4.9	4.9	0.2
REF. NO.	IC2204																			
MODE	1	2	3	4	5	6	7	8												
STOP	5.0	5.0	5.0	5.0	0	0	5.0	5.0												
PLAY	5.0	5.0	5.0	4.9	0	0	4.9	5.0												
REC	5.0	4.9	5.0	4.9	0	0	4.9	5.0												
F.F	4.9	4.9	4.9	4.9	0	0	4.9	4.9												
REW	5.0	4.9	4.9	4.9	0	0	4.9	4.9												
REF. NO.	IC2205																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.7	4.6	4.4	0	0	0	4.9	0	4.7	4.8	3.8	0.5	4.0	0.3	4.6	0	0	0	4.5	5.0
PLAY	4.7	4.6	4.4	0	0	0	4.9	0	4.7	4.7	3.9	0.5	4.0	0.3	4.6	0	0	0	4.5	4.9
REC	4.7	4.6	4.4	0	0	0	5.0	0	4.7	4.7	3.9	0.4	4.0	0.3	4.6	0	0.1	0	4.5	5.0
F.F	4.7	4.6	4.4	0	0	0	4.9	0	4.7	4.8	3.9	0.4	4.0	0.3	4.6	0	0	0	4.5	4.9
REW	4.7	4.6	4.4	0	0	0	4.9	0	4.7	4.8	3.7	0.4	4.0	0.3	4.6	0	0	0	4.5	4.9
REF. NO.	IC2205																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	4.8	2.1	2.3	0	0	0	5.0	5.0	5.0	5.0	0	0	0	0	0	0	0	0	0	0
PLAY	4.8	2.1	2.2	0	0	0	0	5.0	4.9	0	0	0	0	0	0	0	0	0	0	0
REC	4.8	2.0	2.3	0	0	0	5.0	5.0	5.0	5.0	0	0	0	0	0	0	0	0	0	0
F.F	4.8	2.1	2.3	0	0	0	4.9	4.9	4.9	4.9	0	0	0	0	0	0	0	0	0	0
REW	4.8	2.1	2.3	0	0	0	0.4	4.9	4.9	4.9	0	0	0	0.5	0	0	0	0	0	0

REF. NO.	IC2205																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	5.0	0	0	0	0	0	5.0	5.0	4.9	0	0	0	0	0	2.5	2.5	5.0	5.0	0	5.0
PLAY	4.9	0	0	0	0	0	5.0	4.9	4.9	0	0	0	0	0	2.5	2.5	4.9	5.0	0	4.9
REC	4.9	0	0	0	0	0	5.0	5.0	4.9	0	0	0	0	0	2.5	2.5	4.9	4.9	0	5.0
F.F	4.9	0	0	0	0	0	4.9	4.9	4.9	0	0	0	0	0	2.5	2.5	4.9	4.9	0	5.0
REW	4.9	0	0	0	0	0	5.0	4.9	4.9	0	0	0	0	0	2.5	2.5	5.0	5.0	0	4.9

REF. NO.	IC2205																			
MODE	61	62	63	64																
STOP	5.0	5.0	5.0	0.6																
PLAY	4.9	5.0	4.9	0.6																
REC	5.0	5.0	5.0	0.3																
F.F	4.9	4.9	4.9	1.7																
REW	4.9	4.9	4.9	1.2																

REF. NO.	IC2206																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	3.4	3.4	0	3.4	0	3.4	0	3.4	0	0	0	3.4	3.4	0	3.4				
PLAY	0	3.4	3.4	0	1.8	0	3.4	0	3.4	0	0	0	3.4	3.4	0	3.4				
REC	0	3.4	3.4	0	1.8	0	3.4	0	3.4	0	0	0	3.4	3.4	0	3.4				
F.F	0	3.4	3.4	0	1.8	0	3.4	0	3.4	0	0	0	3.4	3.4	0	3.4				
REW	0	3.4	3.4	0	1.8	0	3.4	0	3.4	0	0	0	3.4	3.4	0	3.4				

REF. NO.	IC2207																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.3	3.6	4.7	4.4	5.1	5.1	0	0.7	0.7	0.2	0.2	4.9	0.7	0.7	5.1	0	5.1	5.0	0	5.0
PLAY	4.3	3.6	4.7	4.4	5.1	5.1	0	0.7	1.1	1.1	1.0	4.9	1.1	0.9	1.1	0	5.1	1.1	0	5.0
REC	4.3	3.6	4.7	4.5	5.1	5.1	0	1.3	1.2	1.2	1.2	4.9	1.2	1.2	1.2	0	5.1	5.0	0	5.0
F.F	4.3	3.6	4.7	4.5	5.1	5.1	0	2.3	1.1	1.0	1.0	4.9	1.0	1.0	5.1	0	5.1	5.0	0	5.0
REW	4.3	3.6	4.7	4.4	5.1	5.1	0	2.2	2.2	1.2	1.0	4.9	1.1	1.1	5.1	0	5.1	5.0	0	5.0

REF. NO.	IC2207																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
STOP	5.0	0	5.0	5.0	0	0	5.0	5.0	0	5.0	5.1	0								
PLAY	5.0	0	5.0	5.0	0	0	5.0	5.0	0	1.1	5.1	0								
REC	5.0	0	5.0	5.0	0	0	5.0	5.0	0	5.0	5.1	0								
F.F	5.0	0	5.0	5.0	0	0	5.0	5.0	1.0	5.0	5.1	0								
REW	5.0	0	5.1	5.0	0	0	5.0	5.0	0	5.0	5.1	0								

REF. NO.	IC2208																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.3	3.6	4.7	4.6	5.1	5.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLAY	4.3	3.6	4.7	4.6	5.1	5.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REC	4.3	3.6	4.7	4.6	5.1	5.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F.F	4.3	3.6	4.7	4.5	5.1	5.1	0	0	0	0	0	0	0	0	5.1	0	5.1	5.0	0	5.0
REW	4.3	3.6	4.7	4.5	5.1	5.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REF. NO.	IC2208																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
STOP	3.5	3.5	5.1	0.1	0	0	0.2	0	0	0	0.1	0.1								
PLAY	3.5	3.5	5.1	0.1	0	0	0.2	0	0	0	0.1	0.1								
REC	3.5	3.5	5.1	1.2	0	0	1.9	0	0	0	0.1	1.8								
F.F	5.0	0	5.1	0	0	0	0.1	0	0	0	0.1	0								
REW	3.5	3.5	5.1	0	0	0	0	0	0	0	0.1	0								

REF. NO.	IC2209										IC2210									
MODE	1	2	3								1	2	3							
STOP	5.1	5.1	0								4.7	0	4.7							
PLAY	5.1	5.1	0								4.7	0	4.7							
REC	5.1	5.1	0								4.7	0	4.7							
F.F	5.1	5.1	0								4.7	0	—							
REW	5.1	5.1	0								4.7	0	—							

REF. NO.	IC2211										IC2212									
MODE	1	2	3	4	5	6	7	8			1	2	3	4	5	6	7	8		
STOP	3.4	3.4	3.4	0	0	0	3.4	3.4			3.4	3.4	3.4	0	0	0	3.4	3.4		
PLAY	1.8	2.6	2.6	0	0.8	2.1	3.4	3.4			1.8	3.4	2.1	0	1.3	2.1	3.4	3.4		
REC	1.8	2.6	2.6	0	0.8	2.1	3.4	3.4			1.8	3.4	2.1	0	1.3	1.2	3.4	3.4		
F.F	1.8	2.6	2.6	0	0.8	2.1	3.4	3.4			1.8	3.4	2.1	0	1.3	2.1	3.4	3.4		
REW	1.8	2.6	2.6	0	0.8	2.1	3.4	3.4			1.8	3.4	2.1	0	1.3	2.0	3.4	3.4		

REF. NO.	IC2213										IC2214									
MODE	1	2	3	4	5	6	7	8			1	2	3	4	5	6	7	8		
STOP	0.1	3.4	3.4	0	0	3.4	3.4	3.4			0	3.4	0	0	0	0	0	3.4		
PLAY	0.4	3.4	1.3	0	2.1	3.4	3.4	3.4			1.3	2.6	0	0	0	0.4	0.4	3.4		
REC	0.4	3.4	1.3	0	2.1	3.4	3.4	3.4			1.3	2.6	0	0	0	0.4	0.4	3.4		
F.F	0.4	3.4	1.3	0	2.1	3.4	3.4	3.4			1.3	2.6	0	0	0	0.4	0.4	3.4		
REW	0.4	3.4	1.4	0	2.0	3.4	3.4	3.4			1.3	2.6	0	0	0	0.4	0.4	3.4		

REF. NO.	IC2215										IC2216									
MODE	1	2	3	4	5						1	2	3	4	5					
STOP	0	0.1	0	0	3.4						0	0	0	0	3.4					
PLAY	0	0.4	1.3	0.3	3.4						0	0	0	0	3.4					
REC	0	0.4	0	0.3	3.4						0	0	0	0	1.0					
F.F	0	0.4	0	0.3	3.4						0	0	0	0	3.4					
REW	0	0.3	0	0.3	3.4						0	3.7	0	0	3.4					

EDIT/SYSTEM CONTROL & SERVO TRs DC VOLTAGE CHART (Mini DV : SP MODE)

REF. NO.	Q2201			Q2202			Q2203			Q2204			Q2205			Q2206		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	4.7	0	0	3.8	0.1	0	4.6	0	0	4.8	0	0	4.7	0	0	4.5	0
PLAY	0	4.7	0	0	3.9	0.1	0	4.6	0	0	4.8	0	0	4.7	0	0	0	4.5
REC	0	4.7	0	0	3.8	0.1	0	4.6	0	0	4.8	0	0	4.7	0	0	4.6	0
F.F	0	4.7	0	0	3.8	0.1	0	4.6	0	0	4.8	0	0	4.7	0	0	4.5	0
REW	0	4.7	0	0	3.9	0.1	0	4.6	0	0	4.8	0	0	4.7	0	0	4.5	0

REF. NO.	Q2207		
MODE	E	C	B
STOP	0	4.2	0.1
PLAY	0	4.1	0.1
REC	0	4.2	0.1
F.F	0	4.2	0.1
REW	0	4.2	0.1

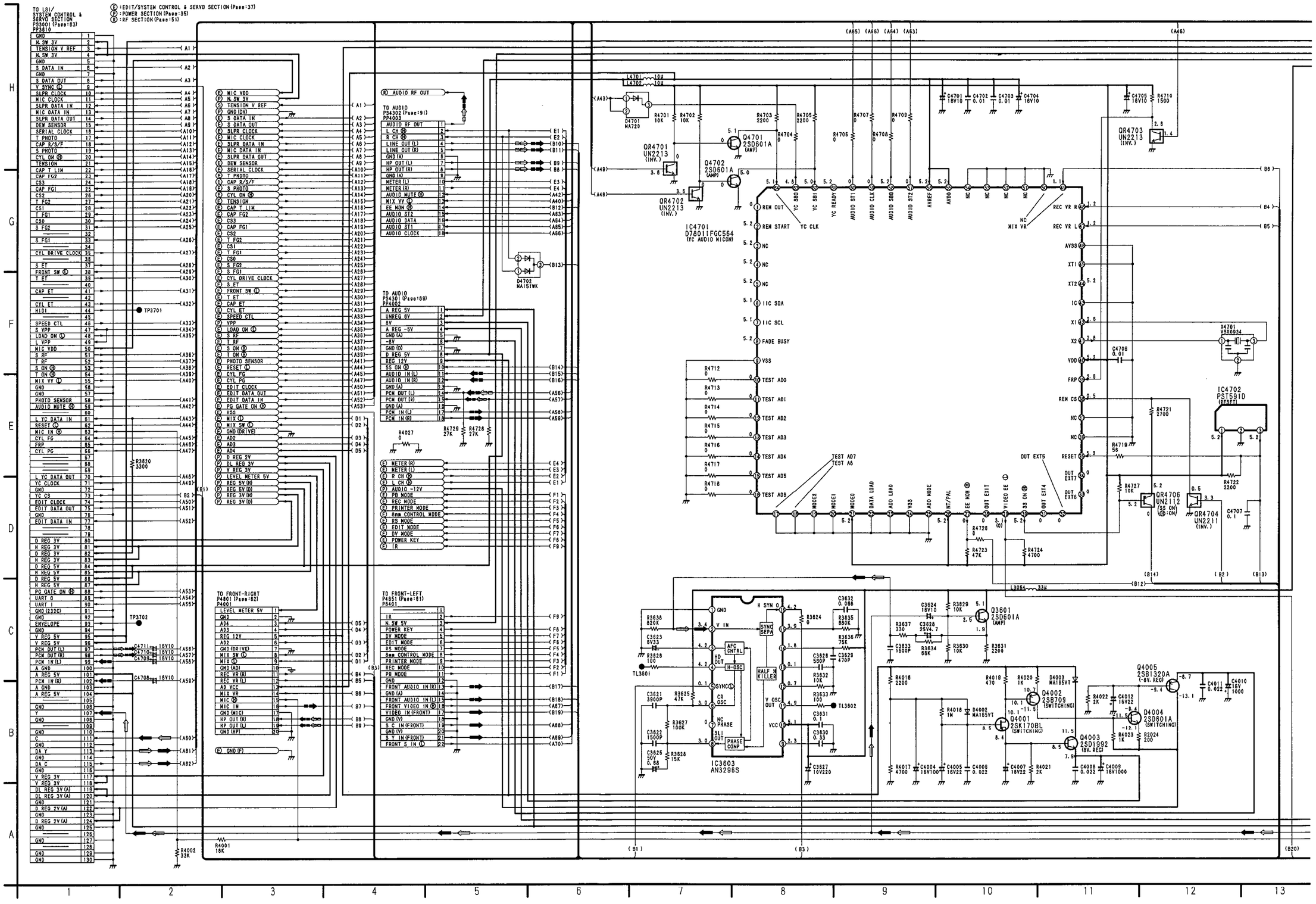
REF. NO.	QR2201			QR2202			QR2203			QR2204			QR2205			QR2206		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0	3.5	0	5.1	0	0	0	3.4	0	0.1	2.8	0	0	4.0	0	0	4.5
PLAY	0	0	3.5	0	5.1	0	0	0	3.4	0	0.1	2.9	0	0	4.0	0	4.5	0
REC	0	0	3.5	0	5.1	0	0	0	3.4	0	0.2	2.8	0	0	4.0	0	0	4.5
F.F	0	0	3.5	0	5.1	0	0	0	3.4	0	0.1	2.9	0	0	4.0	0	0	4.5
REW	0	0	3.5	0	5.1	0	0	0	3.4	0	0.1	2.9	0	0	4.0	0	0	4.5

REF. NO.	QR2207			QR2208			QR2209			QR2210			QR2211			QR2212		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0	3.5	0	0	3.5	0	4.5	1.0	0	3.6	1.1	0	4.5	0.9	0	0	3.3
PLAY	0	0	3.5	0	0	3.5	0	4.5	1.0	0	3.6	1.0	0	4.5	0.9	0	0	3.3
REC	0	0	3.5	0	0	3.5	0	4.6	1.0	0	3.6	1.1	0	4.5	0.9	0	0	3.3
F.F	0	0	3.5	0	0	3.5	0	4.5	1.0	0	3.6	1.0	0	4.5	0.9	0	0	3.3
REW	0	0	3.5	0	0	3.5	0	4.5	1.0	0	3.6	1.1	0	4.5	0.9	0	0	3.3

REF. NO.	QR2213			QR2214			QR2215			QR2216			QR2217			QR2218		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	4.4	0.5	0	0	3.7	0	4.6	0.4	0	5.1	0	0	5.1	0	0	5.0	0
PLAY	0	4.4	0.5	0	0	3.7	0	4.5	0.4	0	0	3.7	0	0	3.7	0	5.0	0
REC	0	4.4	0.5	0	0	3.7	0	4.6	0.4	0	0	3.7	0	0	3.7	0	5.1	0
F.F	0	4.4	0.5	0	0	3.7	0	4.5	0.4	0	0	3.7	0	0	3.7	0	5.0	0
REW	0	4.4	0.5	0	0	3.7	0	4.6	0.4	0	0	3.7	0	0	3.7	0	5.0	0

REF. NO.	QR2219			QR2220			QR2221			QR2222								
MODE	E	C	B	E	C	B	E	C	B	E	C	B						
STOP	0	0	4.7	0	0	3.2	0	0.1	3.1	0	0	3.5						
PLAY	0	0	4.7	0	0	3.2	0	0.1	3.1	0	0	3.5						
REC	0	0	4.7	0	0	3.2	0	0.1	3.1	0	0	3.5						
F.F	0	0	4.7	0	0	3.2	0	0.1	3.2	0	0	3.5						
REW	0	0	4.7	0	0	3.2	0	0.1	3.1	0	0	3.5						

3-15. AUDIO/VIDEO SECTION IN MAIN SCHEMATIC DIAGRAM



:VIDEO MAIN SIGNAL PATH IN REC MODE
:VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
:AUDIO MAIN SIGNAL PATH IN REC MODE
:AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

IC3602 AN3581S
IC3601 UPD4053BG
IC4001 UPD4051BG
IC4002 UPD4051BG
IC4003 BU4053BCF
IC4004 NJM4558M

TO I/O PACK PS3904 (Page:93) PP3404
TO I/O PACK PS3901 (Page:93) PP3401
TO I/O PACK PS3902 (Page:93) PP3402
TO I/O PACK PS3903 (Page:93) PP3403
TO ANALOG Y/C PS30003 (Page:53) PP3503
TO ANALOG Y/C PS30002 (Page:53) PP3502
TO ANALOG Y/C PS30001 (Page:53) PP3501

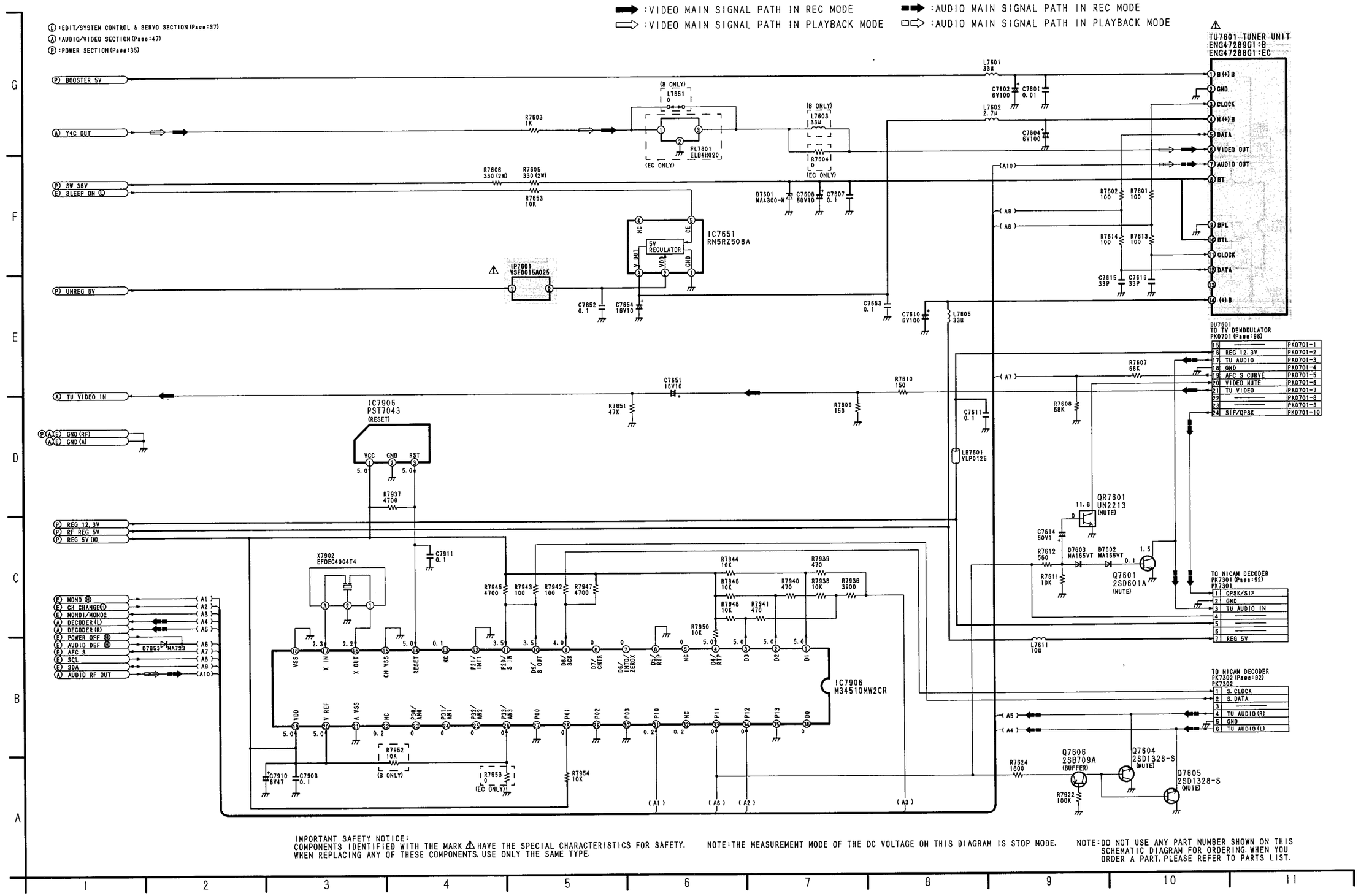
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE) ·LINE IN SIGNAL LEVEL...-10dB 1kHz

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE) ·LINE IN SIGNAL LEVEL...-10dB 1kHz

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST

14 15 16 17 18 19 20 21 22 23 24 25

3-16. RF SECTION IN MAIN SCHEMATIC DIAGRAM

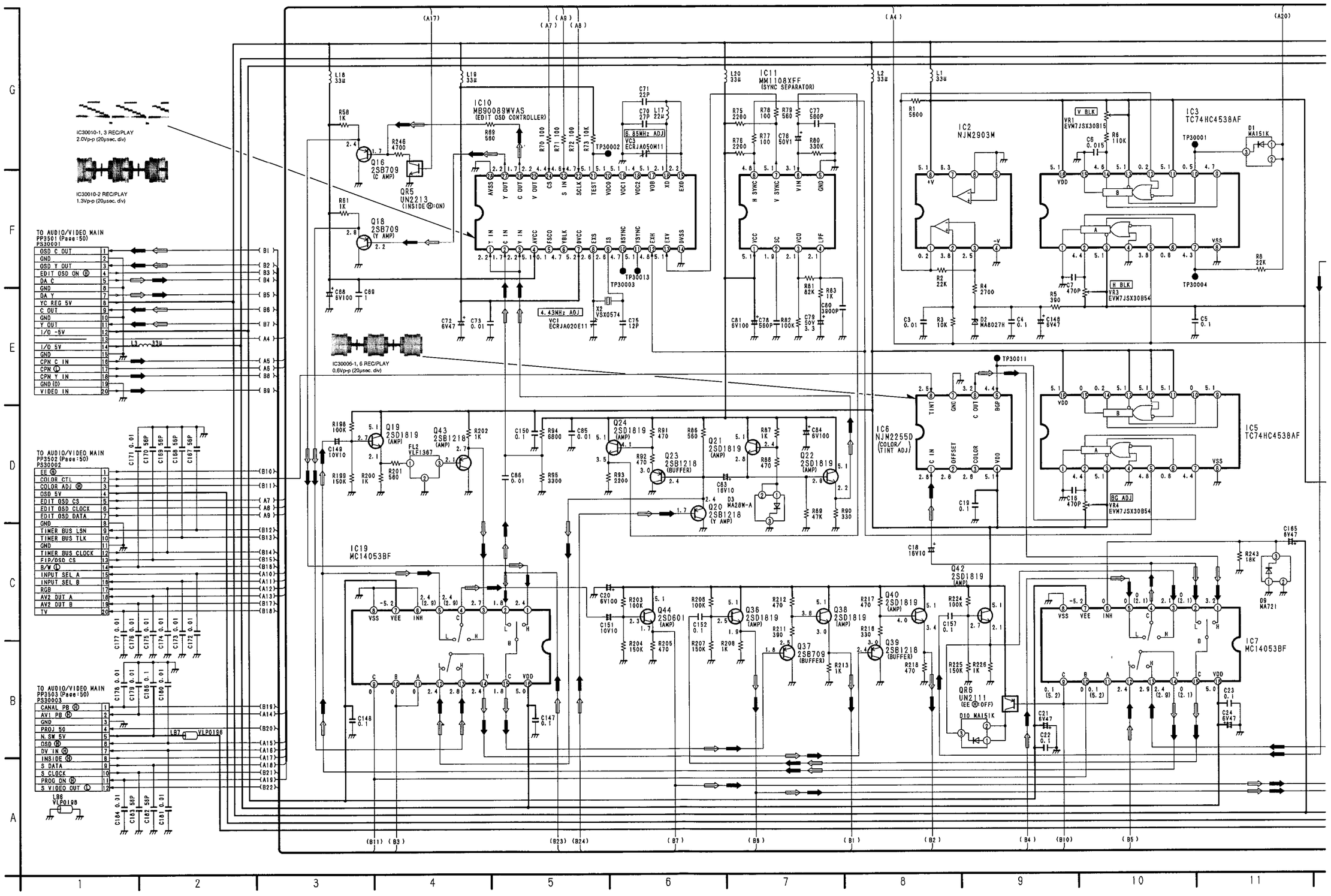


IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

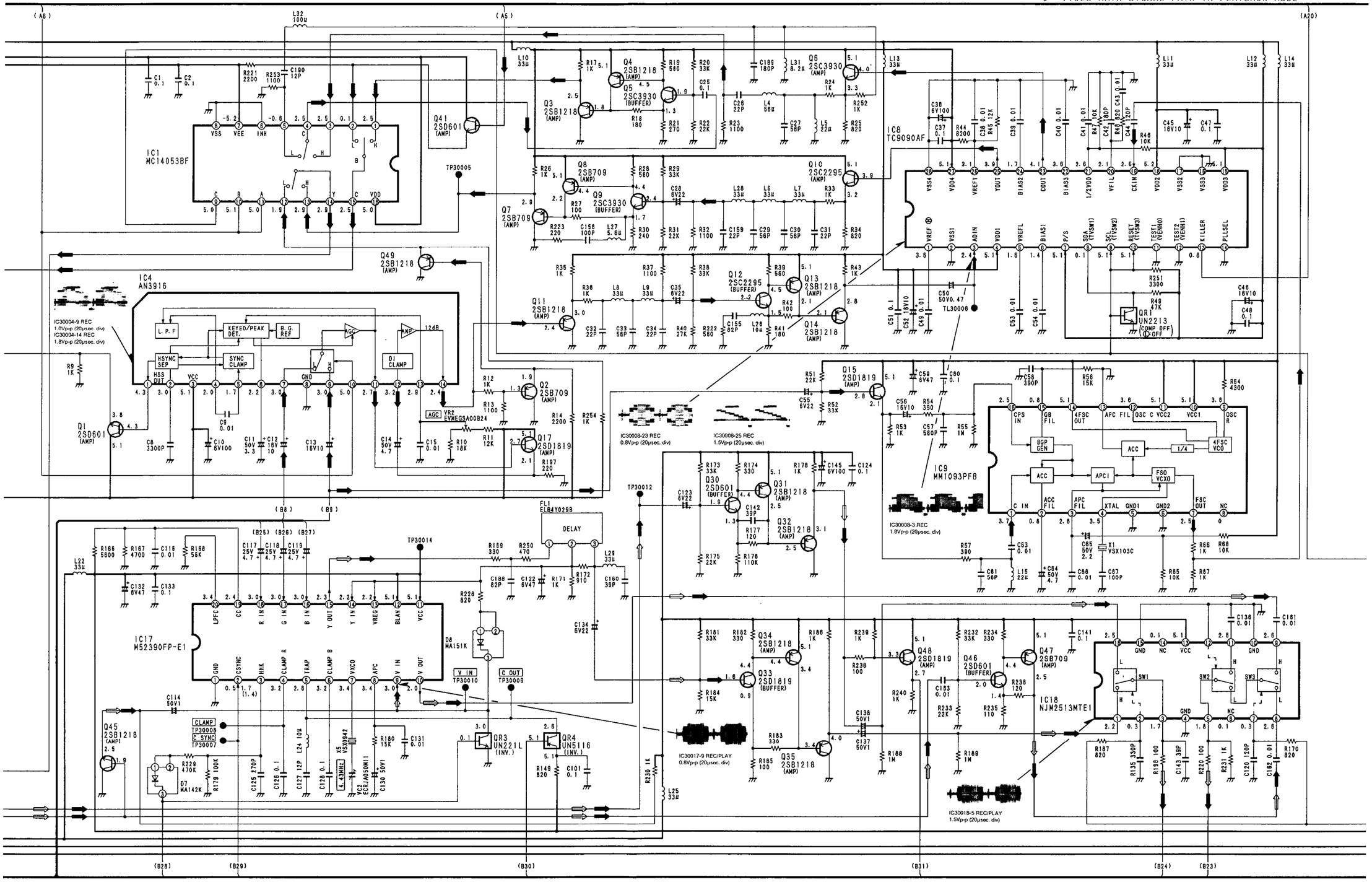
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-17. ANALOG Y/C SCHEMATIC DIAGRAM
[REF. NO. 30000 SERIES]



:VIDEO MAIN SIGNAL PATH IN REC MODE
:VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE



12 13 14 15 16 17 18 19 20 21 22

:VIDEO MAIN SIGNAL PATH IN REC MODE
:VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

IC13 SABC161RIL16 (OSD MICON)
IC12 ST24W16FB6
IC14 S80743AL (RESET)
IC15 M27C2001F88A
IC16 SDA5273-2CS
Q25 2SD1819
Q26 2SD1819
Q27 2SD1819
Q28 2SB709 (AMP)
X3 VSX0830 (16MHz)
X4 VSX0986 (20.48MHz)
D4 MA142K
D5 MA151K
D6 MA8033L

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE)

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE)

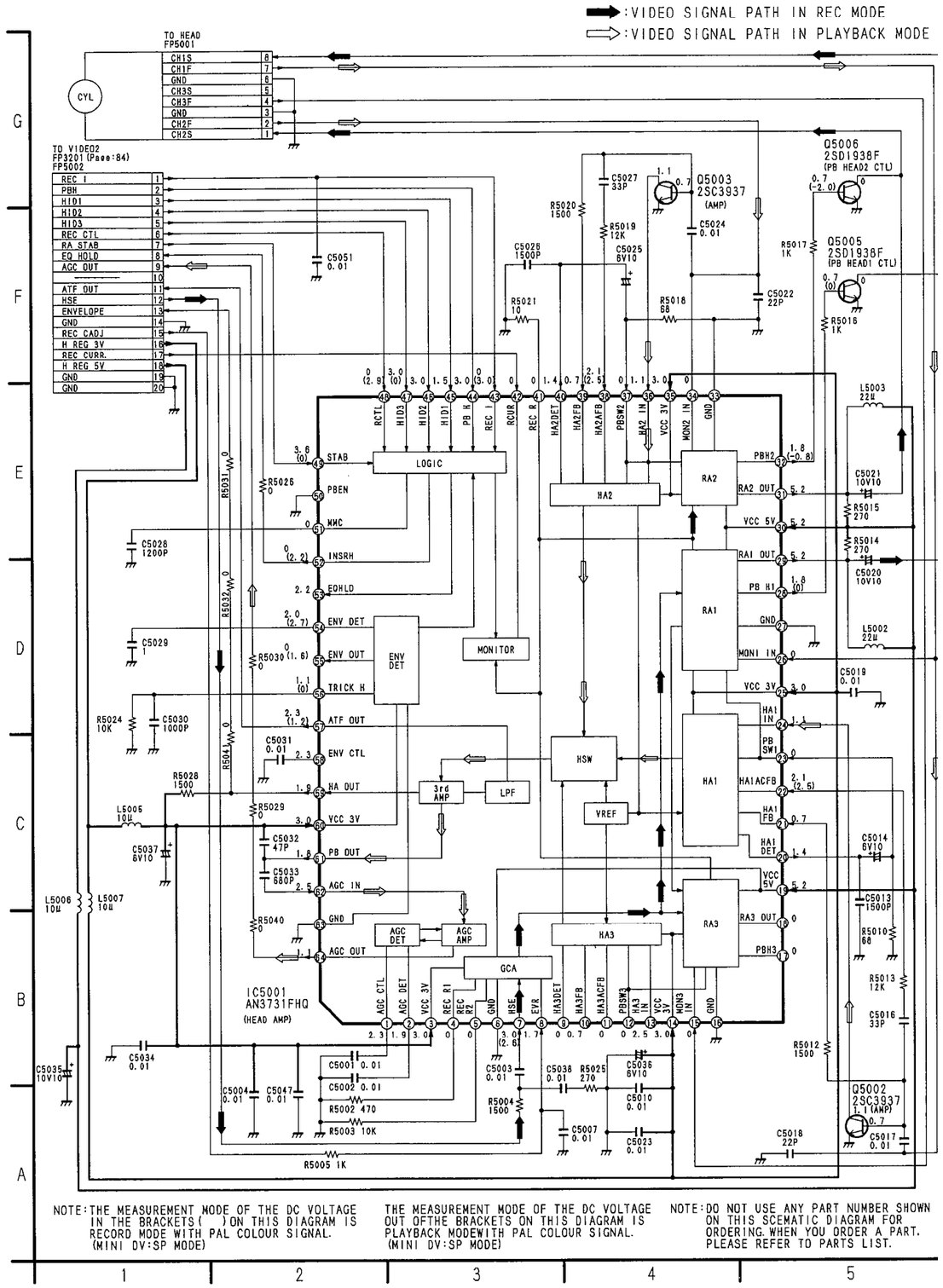
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

23 24 25 26 27 28 29 30 31 32

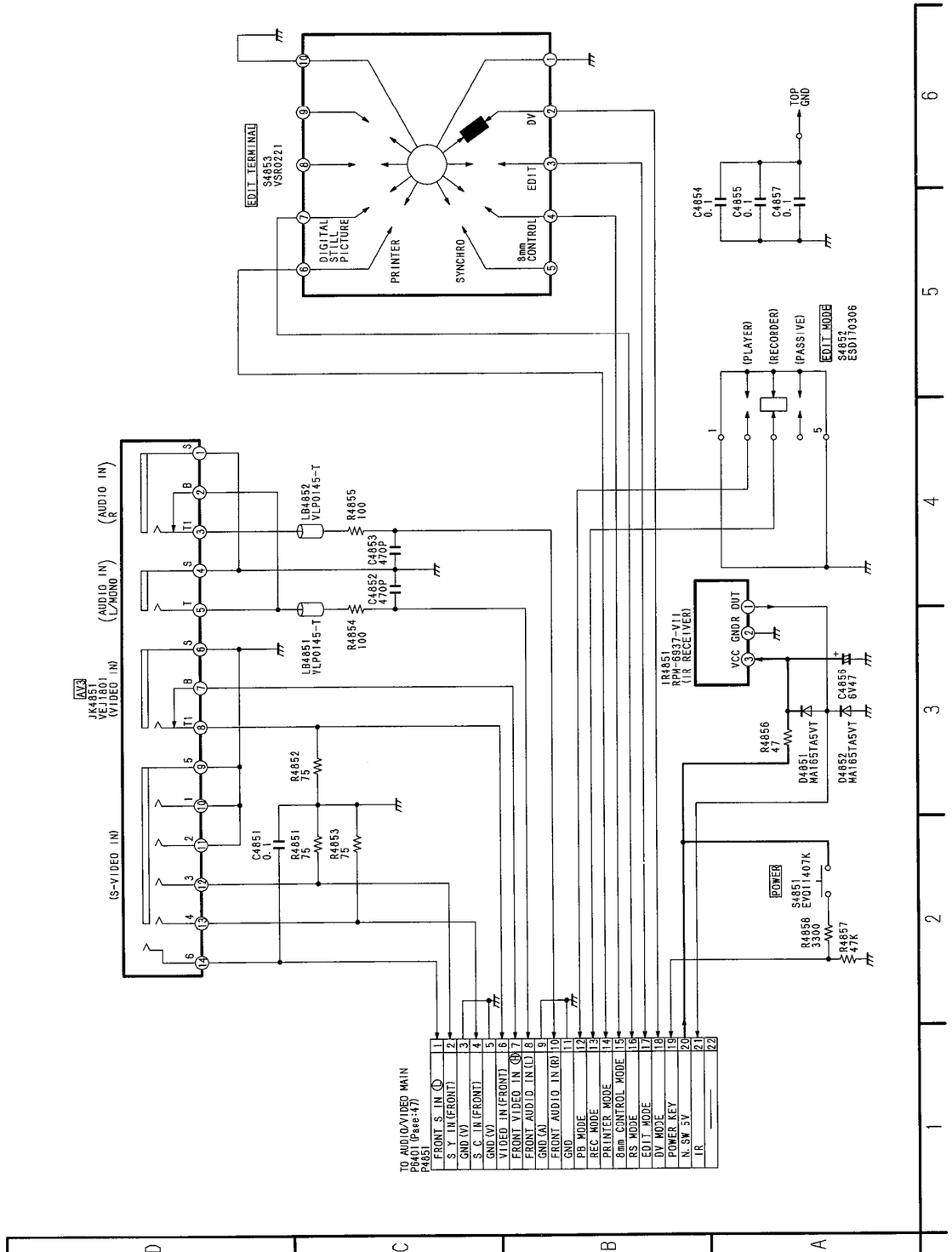
IC30013 (SABC161RIL16): SUB MICON

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
1	DCLCH	I	AD converter, not used
2	DCRCH	I	AD converter, not used
3	JOG2	I	Jog dial 2 input
4	—	I	Hi-Z
5	Vss	—	GND
6	XTAL1	I	Oscillator amplifier input, 16MHz
7	XTAL2	O	Oscillator amplifier output, 16MHz
8	Vcc	I	5V
9	IIC SCL0	O	IIC clock line to CTX IC
10	IIC SDA0	O	IIC data line to CTX IC
11	COMB Ⓗ	O	Comb filter ON Ⓗ, OFF Ⓛ
12	SAT IR	O	Infrared code for SAT receivers
13	SHUTTLE4	I	Shuttle input 4
14	SHUTTLE3	I	Shuttle input 3
15	SHUTTLE2	I	Shuttle input 2
16	SHUTTLE1	I	Shuttle input 1
17	LSN	O	Timer bus listen line
18	TLK	I	Timer bus talk line
19	SCL0 (spare)	O	NC
20	SDA0 (spare)	O	NC
21	RESET Ⓗ	O	Reset signal for Compact Text (0=normal, 1=Reset)
22	CLK	I	Timer bus clock line
23	B/W Ⓛ	O	L and High Impedance; L-B/W selected in FUNCTION menu
24	Vss	—	GND
25	Vcc	I	5V
26	A16	O	A16 address line
27	A17	O	A17 address line
28	A18	O	A18 address line
29	—	I	Pin is active for 4M EPROM
30	—	O	NC (used for ROM Monitor input)
31	—	O	NC (used for ROM Monitor input)
32	S/M Ⓛ	O	Croma Mix for SECAM/MESECAM box
33	/RD	O	External memory read strobe (for EPROM and SRAM)
34	/WR	O	External memory write strobe (for SRAM)
35	/READY	I	Ready input, not used
36	ALE	O	Address latch enable output, not used
37	/EA	—	External access enable pin, connected to GND
38	Vss	—	GND
39	Vcc	I	5V
40	D0	I	D0 data line
41	D1	I	D1 data line
42	D2	I	D2 data line
43	D3	I	D3 data line
44	D4	I	D4 data line
45	D5	I	D5 data line
46	D6	I	D6 data line
47	D7	I	D7 data line
48	Vss	—	GND
49	Vcc	I	5V
50	SAT Ⓗ	O	I/O control: The selection of SAT tuner or AV3. H: SAT tuner L: AV3 In This logic is valid, if AV3 is selected by VA/VB
51	CS EE	O	Write enable for EEPROM. (1=READ only 0=Write enabled)
52	RGB OFF Ⓗ	O	I/O control
53	OSD Ⓗ	O	H=any OSD character displayed, L=no OSD character displayed
54	AV1 PB Ⓗ	O	Pin8 of I/O control → PB Ⓗ
55	PROG Ⓗ	O	I/O control to switch IIC bus for LW-programmer. H: IIC bus is connected to AV2. L: IIC bus is not connected to AV2.
56	VB	O	I/O control: The selection of VCR IN VA/VB:LL:tuner VA/VB:HL:AV1 VA/VB:LH:AV2 VA/VB:HH:AV3 or SAT Normal Audio Input select for ZN/ZT
57	VA	O	Same as Pin56
58	A0	O	A0 address line
59	A1	O	A1 address line
60	A2	O	A2 address line
61	A3	O	A3 address line
62	A4	O	A4 address line
63	A5	O	A5 address line
64	A6	O	A6 address line
65	A7	O	A7 address line
66	Vss	—	GND
67	Vcc	I	5V
68	A8	O	A8 address line
69	A9	O	A9 address line
70	A10	O	A10 address line
71	A11	O	A11 address line
72	A12	O	A12 address line
73	A13	O	A13 address line
74	A14	O	A14 address line
75	A15	O	A15 address line
76	Vss	—	GND
77	Vcc	I	5V
78	/RST	I	Reset Input (LOW level=reset active)
79	/RSTOUT	O	for battery back up circuit
80	/NMI	I	Non maskable interrupt, connected to Vcc
81	/CE	O	Chip enable for external EPROM (0=EPROM enabled)
82	/Y	O	Chip select for SRAM
83	FSCREEN Ⓗ	O	Fullscreen high signal, (0=no OSD fullscreen, 1=OSD fullscreen)
84	AV2 OUT A	O	AV2 output selector A
85	BWBOX Ⓛ	O	force B/W OSD box for SECAM, (0=force B/W boxes, 1=colour boxes)
86	IIC SDA1	O	IIC bus data line 1 (except EEPROM)
87	IIC SCL1	O	IIC bus clock line 1
88	IIC SDA2	O	IIC bus clock line 2 (for EEPROM)
89	P50 IN	I	Project50 input
90	P50 OUT	O	Project 50 output
91	YC/CVBS	I	S VIDEO Ⓛ INPUT
92	AV2 OUT B	O	AV2 output selector B
93	JOG1	I	Jog dial 1 input
94	CSTBUS	I	Chip select signal for timer bus (1=OSD ucon selected, 0=FIP selectyed)
95	—	O	NC (used for ROM Monitor input)
96	TV Ⓗ	O	TV High: for I/O logic
97	VAREF	I	Reference voltage for A/D converter, not used
98	VAGND	—	GND for A/D converter, not used
99	P50 in	I	Reserved for Project50 in
100	CPB Ⓗ	I	PB Ⓗ signal of AV2 is inputted. This logic will be used for I/O control.

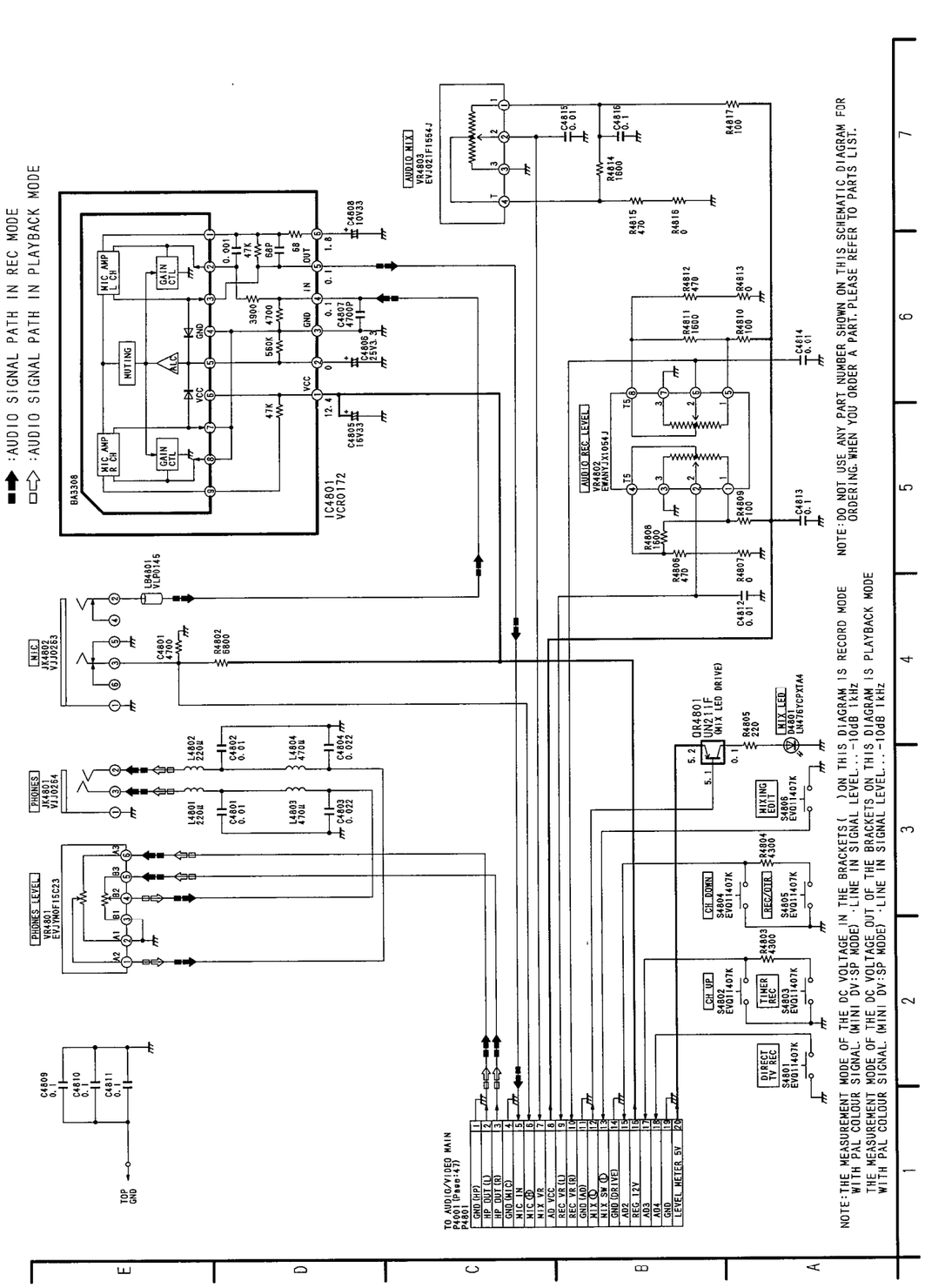
3-18. HEAD AMP SCHEMATIC DIAGRAM



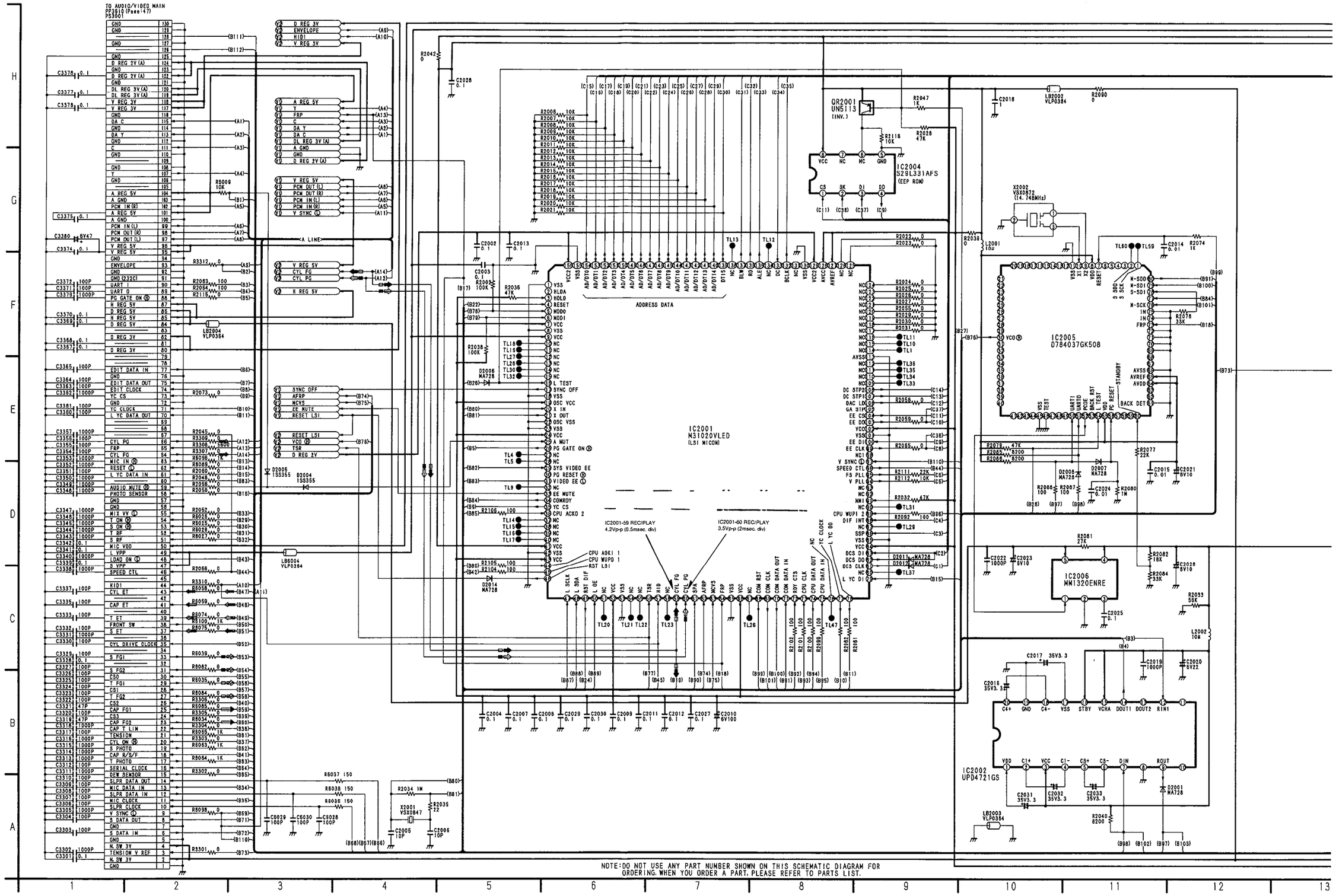
3-19. FRONT (L) SCHEMATIC DIAGRAM



3-20. FRONT (R) SCHEMATIC DIAGRAM



3-21. LSI/SYSTEM CONTROL & SERVO SECTION IN DIAITAL SCHEMATIC DIAGRAM



:CAPSTAN SERVO SPEED LOOP
:CAPSTAN SERVO PHASE LOOP
:CYLINDER SERVO SPEED LOOP
:CYLINDER SERVO PHASE LOOP
:T-REEL SERVO SPEED LOOP
:T-REEL SERVO PHASE LOOP
:S-REEL SERVO SPEED LOOP
:S-REEL SERVO PHASE LOOP

V1 :VIDEO 1 SECTION (Page:75)
V2 :VIDEO 2 SECTION (Page:78)

IC6001-81 REC/PLAY 3.5Vp-p (0.2msec. div)
IC6001-83 REC/PLAY 3.8Vp-p (5μsec. div)
IC6001-92 REC/PLAY 6.3Vp-p (1μsec. div)
IC6001-93 REC/PLAY 7.0Vp-p (1μsec. div)
IC6001-107, 108 REC/PLAY 3.3Vp-p (0.5μsec. div)
IC6001-54 REC/PLAY 3.5Vp-p (1msec. div)
IC6001-55 REC/PLAY 4.0Vp-p (0.5msec. div)

IC6006 TC75W54FU
IC6002 RN5VD29EA (RESET)
IC6004 TC7W74FU
IC6005 TC7S86FU
IC6003 MC14013BFR
IC6001 M31020VLEC (SYSTEM CONTROL)
Q6001 2SB970X (WIC VDD)
QR6001 UN5213 (INV.)
QR2002 UN5213 (LS1 RESET)
QR2003 UN5213 (LS1 RESET)

TO EVR PS3002

1	TDI
2	TDO
3	TCK
4	GND
5	TMS
6	GND
7	GND
8	GND
9	GND
10	GND
11	GND
12	GND
13	GND
14	GND
15	GND
16	GND
17	32C VCC
18	GND
19	32C VCC
20	NSW1 3V
21	REC CURR.
22	NSW3 3V
23	ENVELOPE
24	ATF1
25	
26	VIDEO VCO
27	
28	L VSS
29	L TEST
30	L VEE
31	L SCLK
32	UART I
33	L SDA
34	UART O
35	L BUSY
36	L VCC
37	L OE
38	RF GND
39	S MODO
40	L RESET
41	S MODI
42	L MODO
43	S SCLK
44	L MODI
45	S SDA
46	L VPP
47	S BUSY
48	L VPP2
49	S OE
50	S RESET
51	HIDI
52	S VCC
53	SPA
54	S VPP
55	MIC CLK
56	S VEE
57	S TEST
58	S VPP2
59	MIC DATA IN
60	S VSS

VIDEO VCO
ATF I
REC CURR.
SPA
RA STAB

14 15 16 17 18 19 20 21 22 23 24 25

IC2001(M31020VLED) : LSI MICON

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION	PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
1	VSS	—		60	CYL PG	I	Cylinder PG
2	HLDA	O	Ext-Bus Hold Acknowlede/BST TCK (CLK)	61	SPA	I	SPA
3	HOLD	I	Ext-Bus Hold Request	62	AFRP	I	AFRP
4	RESET	I	Reset	63	MCVS	I	MCVS
5	MOD0	I	Single Chip Mode = Vss Vss	64	FRP	I	Frame reference pulse
6	MOD1	I	Memory Extend Mode = Vss Vcc	65	VSS	—	
7	VCC	—		66	VCC	—	
8	VSS	—		67	NC	O	—
9	VCC	—		68	COM RST	O	RS232C RESET
10	NC	O	—	69	COM CLK	I	RS232C CLK IN
11	NC	O	—	70	COM DATA OUT	O	RS232C SERIAL-DATA OUT
12	NC	O	—	71	COM DATA IN	I	RS232C SERIAL-DATA IN
13	NC	O	—	72	RDY CTS	I	from SYSCON ACK
14	NC	O	—	73	CPU CLK	O	to SYSCON CLK
15	NC	O	—	74	CPU DATA OUT	O	to SYSCON DATA
16	L TEST	I	EVR TEST MODE (L)	75	CPU DATA IN	I	from SYSCON DATA
17	SYNC OFF	O	L: Sync Gate Off H: Sync Gate On	76	NC	O	—
18	VSS	—		77	YC CLOCK	O	YC MICON Serial Clook
19	OSC VCC	—		78	L YC DO	O	YC MICON Data out
20	X IN	I	27MHz	79	L YC DI	I	YC MICON Data in
21	X OUT	O	27MHz	80	NC	O	—
22	OSC VSS	—		81	DSC CLK	O	CAS & DVIO Serial Clock
23	VSS	—		82	DSC D0	O	CAS & DVIO Serial Data Out
24	VCC	—		83	DSC D1	I	CAS & DVIO Serial Data In
25	A MUT	O	AUDIO MUTE	84	VCC	—	
26	PG GATE ONⒽ	O	PG GATE Control	85	VSS	—	
27	NC	O	—	86	SSP	I	Sector Start Pulse
28	NC	O	—	87	NC	O	—
29	SYS VIDEO EE	I	SYSCON EE/VV	88	DIF INT	I	Digital Interface IF
30	PG RESETⒽ	O	PG RESET	89	CPU WUPI 2	O	—
31	VIDEO EEⓁ	O	I/O Pack EE/VV Select	90	NC	O	—
32	NC	O	—	91	NMI	I	Pull-up
33	EEMUTE	O	EE MUTE	92	NC	O	—
34	COMRDY	O	232C MICON RDY	93	NC	O	—
35	YC CS	O	YC MICON CS	94	V PLL	O	Video PLL
36	CPU ACK 0-2	O	—	95	FS PLL	O	FS PLL (ATF ERR for Linear arrengement)
37	CTL 27M	O	27MHz Freq. Select	96	NC3(SPEED CTL)	I	CYL PG Amp Control (FF/REW 100 Times or more)
38	NC	O	—	97	NC2(VSYNC)	I	REC V Countermeasure
39	NC	O	—	98	NC1	O	Spare
40	NC	O	—	99	EE CLK	O	EEprom & DAC Clock
41	VCC	—		100	EE DI	I	EEprom & DAC Data In
42	VSS	—		101	VSS	—	
43	VCC	—		102	VCC	—	
44	CPU ACKO-1	I	from SYSCON ACK	103	EE DO	O	EEprom & DAC Data Out
45	CPU WUPO-1	O	to SYSCON REQ	104	EE CS	O	EEprom Chip Select
46	RST LSI	O	DVIO, CAS, EDA Reset	105	GA STP	O	L: Active H: Not Active
47	L SCKL	I	for FLASH CLK	106	DAC LD	O	DAC Load
48	L SDA	I	for FLASH DATA IN	107	DCS STP1	O	DVIO Serial Strobe Pulse
49	RST DIF	O	DIF LSI Reset	108	DCS STP2	O	CAS Serial Strobe Pulse
50	L 0E	I	for FLASH WRITE 0E	109	NC	O	—
51	NC	O	—	110	NC	O	—
52	VCC	—		111	NC	O	—
53	VSS	—		112	NC	O	—
54	NC	O	—	113	AVSS	—	
55	NC	O	—	114	NC	I	Connect to GND (0Ω)
56	TSR	I	Track Start Refference	115	NC	I	Connect to GND (0Ω)
57	HID	I	HSW	116	NC	I	Connect to GND (0Ω)
58	NC	O	—	117	NC	I	Connect to GND (0Ω)
59	CYL FG	I	Cylinder FG	118	NC	I	Connect to GND (0Ω)

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION	PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
119	NC	I	Connect to GND (0Ω)	138	BHW	O	—
120	NC	I	Connect to GND (0Ω)	139	DT15	I/O	EXT-Memory Address/Data Bus
121	NC	I	Connect to GND (0Ω)	140	ADDT14	I/O	EXT-Memory Address/Data Bus
122	NC	I	Connect to GND (0Ω)	141	ADDT13	I/O	EXT-Memory Address/Data Bus
123	NC	I	Connect to GND (0Ω)	142	ADDT12	I/O	EXT-Memory Address/Data Bus
124	NC	I	Connect to GND (0Ω)	143	ADDT11	I/O	EXT-Memory Address/Data Bus
125	NC	I	Connect to GND (0Ω)	144	ADDT10	I/O	EXT-Memory Address/Data Bus
126	NC	I	Connect to GND (0Ω)	145	ADDT9	I/O	EXT-Memory Address/Data Bus
127	AVREF	—		146	ADDT8	I/O	EXT-Memory Address/Data Bus
128	AVCC	—		147	ADDT7	I/O	EXT-Memory Address/Data Bus
129	VCC2	—		148	ADDT6	I/O	EXT-Memory Address/Data Bus
130	VSS	—		149	ADDT5	I/O	EXT-Memory Address/Data Bus
131		O	—	150	ADDT4	I/O	EXT-Memory Address/Data Bus
132	BCLK	O		151	ADDT3	I/O	EXT-Memory Address/Data Bus
133	D0	I	Data Complete for Ext-Momory mode	152	ADDT2	I/O	EXT-Memory Address/Data Bus
134	R/W	O	—	153	ADDT1	I/O	EXT-Memory Address/Data Bus
135	ALE	O	Address Latch Enable for Ext-Memory mode	154	ADDT0	I/O	EXT-Memory Address/Data Bus
136	RD	O	Read Strobe for Ext-Memory mode	155	VSS	—	
137	BLW	O	Byte Low Write for Ext-Memory mode	156	VCC2	—	

IC2005 (D784037GK508) : RS-232C INTERFACE MICROCOMPUTER

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION	PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
1	EVR SCK	O	Serial Clock Signal for SYNC Serial Communication (To Camera Micom)	46	TEST	—	GND
				47	CGCS	O	CG CS
2	EVR SBO	O	Serial Data Signal for SYNC Serial Communication (To Camera Micom)	48	CGPCL	O	CG PCL
				49	P12	—	(N.C.)
5	VTR T	O	SYNC Serial Communication Enable Signal for Camera Micom	50	UARTI	I	RS-232C Data
				51	UARTO	O	RS-232C Data
7	RESET	I	Reset Signal	52	PCOE	O	RS-232C Driver Output Enable
8	VDD	—	VDD (+3V)	53	BACK RST	—	(N.C.)
9	X2	O	Oscillator (14.7456MHz)	54	TEST0	I	VTR Test Signal (H: Normal, L: Test Mode)
10	X1	I	Oscillator (14.7456MHz)				
11	GND	—	GND	55	VDD	—	VDD (+3V)
12	S TITLE L	O	Sound Effect Control Signal	56	PC RST	I	Reset Signal Detect (AD Input)
13	LR CONT	O	LCD Driver Control (L/R Invert)	60	STBY	I	RS-232C Cable Connect Confirm
14	UD CONT	O	LCD Driver Control (U/D Invert)	61	BACK DET	—	GND
15	LCD P SAVE	—	(N.C.)	64	AVDD	—	Voltage for AD Converter (+3V)
17	INSEL	—	(N.C.)	65	AVREF1	—	Refference Voltage for AD Converter (+3V)
18	TALLY	O	TALLY LED Control				
19	A LINE H	—	(N.C.)	66	AVSS	—	GND for AD Converter
20	T PH AD2	O	Take μ	67	ANO0	—	(N.C.)
21	T PH AD1	O	Take μ	68	ANO1	—	(N.C.)
22	S PH AD2	O	Supply Tape Sensor	69	AVREF2	—	GND
23	S PH AD1	O	Supply Tape Sensor	70	AVREF3	—	GND
24	EYE P SAVE	—	(N.C.)	71	P20	—	GND
25	LCD WIDE	O	LCD Driver Wide Select	72	CAM T	I	Camera Service/232C Micom Select Signal (H: 232C, L: Camera Service)
26	SPK ON H	O	Speaker ON				
27	WIDNSW H	O	Noise Silent	73	FRP	I	Frame SYNC Signal
28	VTR LED	O	VTR Mode LED	76	SCK	I	Serial Clock Signal for SYNC Serial Communication (To VTR Micom)
29	CAM LED	O	CAMERA Mode LED				
30	VCO H	O	VCO Test Mode Ⓗ	77	COM RDY	I	SYNC Serial Communication Enable Signal for VTR Micom
31	LCD BL CONT	O	LCD Back Light Control Signal				
32	BL BRIGHT H	O	Back Light Bright Control Signal	78	EVR SDI	I	Serial Data Input for SYNC Serial Communication (To Camera Micom)
33	EVF BL CONT	O	EVF Back Light Control Signal				
34	EVF ON	O	EVF ON	79	SDI	I	Serial Data for SYNC Serial Communication (To VTR Micom)
35	LCD ON	O	LCD ON				
44	CLKOUT	—	(N.C.)	80	SDO	O	Serial Data for SYNC Serial Communication (To VTR Micom)
45	GND	—	GND				

IC6001 (M31020VLEC) : SYSTEM CONTROL MICROPROCESSOR

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
1	GND	—	
2	—	O	Low FIX
3	—	O	Low FIX
4	RESET	I	RESET INPUT
5	MOD0	I	SIGNAL CHIP MODE SELECT
6	MOD1	I	SIGNAL CHIP MODE SELECT
7	VDD	—	VDD
8	GND	—	GND
9	VDD	—	VDD
10	VIDEO.EEⓁ	O	EE/VV SELECT OUTPUT (EE: L)
11	A.MUTⒽ	O	AUDIO MUTE Ⓗ
12	ERASEⒽ	O	ERASE ON Ⓗ/OFF
13	PHOTO.SNS	O	TAPE SENSOR LED (ON: L)
14	RASTAB	O	S TAB OUTPUT
15	MIX.VVⓁ	O	MIX OUTPUT (VV MODE): L
16	EE.MONIⓁ	O	EE MONITOR OUT: L
17	—	O	FIX LOW OUTPUT
18	GND	—	GND
19	VDD	—	OSC POWER
20	27MHz. IN	I	27MHz INPUT
21	27MHz. OUT	O	27MHz OUTPUT
22	GND	—	OSC GND
23	GND	—	GND
24	VDD	—	POWER
25	FRONT SW	I	FRONT DOOR OPEN DETECT INPUT (OPEN: L, CLOSE/NO DOOR: H)
26	MP ADUB	O	FIX Low OUTPUT
27	—	O	FIX Low OUTPUT
28	PINCH ONⒽ	O	PINCH SOLENOID CONTROL OUTPUT
29	—	O	FIX Low OUTPUT
30	—	O	FIX Low OUTPUT
31	—	O	FIX Low OUTPUT
32	TRAY VCHANGE	O	TRAY MOTOR VOLTAGE CONTROL OUTPUT
33	S SOL ONⒽ	O	S REEL SOLENOID CONTROL OUTPUT
34	T SOL ONⒽ	O	T REEL SOLENOID CONTROL OUTPUT
35	PINE RSTⒽ	O	RESET High OUTPUT
36	—	O	FIX LOW OUTPUT
37	S.ONⒽ	O	S REEL ON/OFF CONTROL
38	T.ONⒽ	O	T REEL ON/OFF CONTROL
39	S.RF	O	S REEL ROTATION DIRECTION CONTROL
40	T.RF	O	T REEL ROTATION DIRECTION CONTROL
41	VDD	—	POWER
42	GND	—	GND
43	VDD	—	POWER
44	MIC.ONⒽ	O	POWER FOR MIC
45	CS0	O	SERIAL/PARALLEL CONVERSION IC CHIP SELECT SIGNAL
46	CS1	O	SERIAL/PARALLEL CONVERSION IC CHIP SELECT SIGNAL
47	CS2	O	SERIAL/PARALLEL CONVERSION IC CHIP SELECT SIGNAL
48	CS3	O	SERIAL/PARALLEL CONVERSION IC CHIP SELECT SIGNAL
49	CAP.T.LIM	O	CAP TORQUE LIMIT
50	CYL.ONⓁ	O	CYL DRIVING: Low
51	CAP.R/S/F	O	CAPSTAN ROTATION DIRECTION CONTROL
52	VDD	—	POWER
53	GND	—	GND
54	CYL.FG	I	CYLINDER FG
55	CAP.FG	I	CAPSTAN 2 PHASE FG
56	TSR	I	HID PHASE REF. SIGNAL
57	HID	I	HEAD SELECT SW
58	CAP.FG2	I	CAPSTAN FG 2
59	T.FG1	I	T REEL FG 1
60	S.FG1	I	S REEL FG 1
61	SPA	I	
62	—	O	FIX Low OUTPUT
63	—	O	FIX Low OUTPUT
64	FRP	I	FRAME REF. SIGNAL
65	GND	—	GND
66	VDD	—	POWER
67	(CPU WUP0-2)	O	SYS CTL µ-PROCESSOR ⟷ LSI (OMMUNICATION)
68	CPU ACK0-1	O	SYS CTL µ-PROCESSOR ⟷ LSI (OMMUNICATION)
69	SLPR.CLOCK	O	SERIAL/PARALLEL CONVERSION EXPANSION IC
70	SLPR. DATA. OUT	O	SERIAL/PARALLEL CONVERSION EXPANSION IC
71	SLPR. DATA. IN	I	SERIAL/PARALLEL CONVERSION EXPANSION IC
72	CPU RDY/CTS	O	SYS CTL µ-PROCESSOR ⟷ LSI COMMUNICATION
73	CPU CLOCK	I	SYS CTL µ-PROCESSOR ⟷ LSI SERIAL SLAVE CLOCK
74	CPU DATA OUT	O	SYS CTL µ-PROCESSOR ⟷ LSI SERIAL DATA OUTPUT
75	CPU DATA IN	I	SYS CTL µ-PROCESSOR ⟷ LSI SERIAL DATA INPUT
76	(CPU ACKI-2)	O	SYS CTL µ-PROCESSOR ⟷ LSI COMMUNICATION
77	EDIT.CLOCK	O	SYS CTL µ-PROCESSOR ⟷ EDIT MICON SERIAL MASTER CLOCK
78	EDIT. DATA. OUT	O	SYS CTL µ-PROCESSOR ⟷ EDIT MICON SERIAL DATA OUTPUT
79	EDIT. DATA. IN	I	SYS CTL µ-PROCESSOR ⟷ EDIT MICON SERIAL DATA INPUT
80	—	O	FIX Low OUTPUT
81	SIRIAL.CLOCK	O	TIMER ⟷ SYS CTL µ-PROCESSOR MASTER CLOCK
82	S. DATA. OUT	O	TIMER ⟷ SYS CTL µ-PROCESSOR SIRIAL DATA OUTPUT
83	S. DATA. IN	I	TIMER ⟷ SYS CTL µ-PROCESSOR SIRIAL DATA INPUT
84	VDD	—	POWER
85	GND	—	GND
86	S. DIR	I	S REEL ROTATION DIRECTION DET.
87	T. DIR	I	T REEL ROTATION DIRECTION DET.
88	CAP. DIR	I	CAPSTAN ROTATION DIRECTION DET.
89	CPU WUPI-1	O	SYS CTL µ-PROCESSOR ⟷ LSI PROCESSOR COMMUNICATION
90	SSP	I	SECTOR START PULSE INPUT
91	—	I	
92	CYL. ET	O	CYLINDER TORQUE OUTPUT (12bit PWM)
93	CAP. ET	O	CAPSTAN TORQUE OUTPUT (12bit PWM)
94	T. ET	O	T REEL TORQUE OUTPUT (12bit PWM)
95	S. ET	O	S REEL TORQUE OUTPUT (14bit PWM)
96	DRV. CLK	O	CYLINDER DRIVER CLOCK

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
97	MIC. DATA	I/O	MIC SERIAL DATA
98	MIC. CLK	O	MIC SERIAL CLOCK
99	TM1 OKⒽ	O	TIMER SERIAL CLOCK (500µ sec.)
100	SMAIN OKⒽ	O	SYS. CTL MAIN ROUTIN (20msec.)
101	GND	—	GND
102	VDD	—	POWER
103	S. FG1	I	S REEL FG 1
104	S. FG2	I	S REEL FG 2
105	T. FG1	I	T REEL FG 1
106	T. FG2	I	T REEL FG 2
107	CAP. FG1	I	CAPSTAN FG 1
108	CAP. FG2	I	CAPSTAN FG 2
109	LOADⒽ	O	LOADING MOTOR FORWARD OUTPUT
110	UNLOADⒽ	O	LOADING MOTOR REVERSE OUTPUT
111	TRAY LOADⒽ	O	TRAY MOTOR FORWARD OUTPUT
112	TRAY UNLDⒽ	O	TRAY MOTOR REVERSE OUTPUT
113	GND	—	GND
114	TEN V REF	I	INPUT
115	NTSCⓁ	I	NTSC = LOW/PAL = HIGH
116	S. TEST	I	EVR ADJ INPUT
117	—	I	VIA RESISTOR GND
118	—	I	VIA RESISTOR GND
119	—	I	VIA RESISTOR GND
120	TENSION	I	TAPE TENSION A/D INPUT
121	S. PHOTO	I	S PHOTO SENSOR INPUT (BLACK TAPE: L)
122	T. PHOTO	I	T PHOTO SENSOR INPUT (BLACK TAPE: L)
123	DEW. SNS	I	DEW SENSOR INPUT
124	MIC. AD3	I	A/D INPUT 3 FOR MIC
125	MIC. AD2	I	A/D INPUT 2 FOR MIC
126	MIC. AD1	I	A/D INPUT1 FOR MIC
127	VDD	—	REF. POWER FOR ANALOG
128	VDD	—	ANALOG POWER
129	VDD	—	POWER FOR BUS
130	GND	—	GND
131	VSYNCⓁ	I	V SYNC INPUT (SYNC EXIST: L)
132	—	O	
133	—	I	GND (VIA 47k Resistor)
134	MIC INⒽ	I	MIC INPUT (MIC IN: H)
135	—	O	FIX Low OUTPUT
136	—	O	FIX Low OUTPUT
137	—	O	FIX Low OUTPUT
138	—	O	FIX Low OUTPUT
139	—	O	
140	—	O	FIX Low OUTPUT
141	—	O	FIX Low OUTPUT
142	—	O	FIX Low OUTPUT
143	—	O	FIX Low OUTPUT
144	—	O	FIX Low OUTPUT
145	—	O	FIX Low OUTPUT
146	—	O	FIX Low OUTPUT
147	—	O	FIX Low OUTPUT
148	—	O	FIX Low OUTPUT
149	—	O	FIX Low OUTPUT
150	—	O	FIX Low OUTPUT
151	—	O	FIX Low OUTPUT
152	—	O	FIX Low OUTPUT
153	—	O	FIX Low OUTPUT
154	—	O	FIX Low OUTPUT
155	GND	—	GND
156	VDD 2	—	GND

LSI/SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (Mini DV : SP MODE)

REF. NO.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	3.6	3.6	2.7	0	3.6	3.6	0	3.6	0	0	0	0	0	0	3.6	3.6	0	3.6	1.7
PLAY	0	3.6	3.6	2.7	0	3.6	3.6	0	3.6	0	0	0	0	0	0	3.6	0	0	3.6	1.7
REC	0	3.6	3.6	2.7	0	3.6	3.6	0	3.6	0	0	0	0	0	0	3.6	3.6	0	3.6	1.7
F.F	0	3.6	3.6	2.7	0	3.6	3.6	3.6	3.6	0	0	0	0	0	0	3.6	3.6	0	3.6	1.7
REW	0	3.6	3.6	2.6	0	3.6	3.6	0	3.6	0	0	0	0	0	0	0	3.6	0	3.6	1.7
REF. NO.	IC2001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	1.7	0	0	3.6	0	0	0	0	0	0	0	0	0	3.6	3.3	0	0	0	0	0
PLAY	1.8	0	0	3.6	0	0	0	0	3.6	0	3.6	0	0	3.6	3.3	0	3.6	0	0	0
REC	1.7	0	0	3.6	0	0	0	0	0	0	0	0	0	3.6	3.3	0	0	0	0	0
F.F	1.8	0	0	3.6	0	0	0	0	0	0	0	0	0	3.6	3.3	0	0	0	0	0
REW	1.8	0	0	3.5	0	3.6	0	0	0	0	0	0	0	3.6	3.3	0	0	0	0	0
REF. NO.	IC2001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	3.6	0	3.6	0	0	3.6	3.6	3.6	3.6	3.6	0	3.6	0	0	0	1.5	1.5	0	1.7	0.2
PLAY	3.6	0	3.6	0	0	3.6	3.6	3.6	3.6	3.6	0	3.6	0	0	0	1.5	1.5	0	1.7	0.2
REC	3.6	0	3.6	0	0	3.6	3.6	3.6	3.6	3.6	0	3.6	0	0	0	1.5	1.5	0	1.7	0.2
F.F	3.6	0	3.6	0	0	3.6	3.6	3.6	3.6	3.6	0	3.6	0	0	0	1.5	1.5	0	1.7	0.2
REW	3.6	0.7	3.6	0	0	3.6	3.6	3.6	3.6	3.6	0	3.6	0	0	0	1.5	1.5	0	1.6	0.2
REF. NO.	IC2001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	1.5	1.5	1.5	0	3.6	0	3.6	3.5	3.3	0.1	3.6	3.6	3.6	1.8	0	3.6	3.5	2.8	0
PLAY	0	1.5	1.5	1.5	0	3.6	0	3.6	3.5	3.3	0.1	3.6	3.6	3.6	1.5	0	3.6	3.5	2.8	0
REC	0	1.5	1.5	1.5	0	3.6	0	3.6	3.5	3.3	0	3.6	3.6	3.6	1.8	0	3.6	3.5	2.8	0
F.F	0	1.5	1.5	1.5	0	3.6	0	3.6	3.5	3.3	0.1	3.6	3.6	3.6	1.8	0	3.6	3.5	2.8	0
REW	0	1.5	1.5	1.5	0	3.6	0	3.6	3.5	3.3	0.1	3.6	3.6	3.6	1.8	0	3.6	3.5	2.8	0.9
REF. NO.	IC2001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	3.6	2.9	2.9	3.6	0	0	0	3.0	0	0	3.6	0	0	1.1	0	1.0	0	3.6	3.6	1.6
PLAY	3.6	3.0	2.9	3.6	0	0	0	3.0	0	0	3.6	0	0	0	1.6	1.0	0	3.6	3.6	1.1
REC	3.6	3.2	2.9	3.6	0	0	0	3.0	0	0	3.6	0	0	1.1	0	0.9	0	3.6	3.6	1.8
F.F	3.6	3.1	2.9	3.5	0	0	0	3.0	0	0	3.6	0	0	1.1	0	1.1	1.0	3.6	3.6	1.8
REW	3.6	3.3	2.9	3.6	0	0	0	3.0	0	0	3.6	0	0	1.1	0	1.0	3.6	3.6	3.6	1.8
REF. NO.	IC2001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	0	3.6	3.6	0	0	0	2.7	3.5	0	0	0	0	0	1.5	1.5	1.5	0	0	0	0
PLAY	0	3.6	3.6	0	0	0	2.7	3.4	0	0	0	0	0	1.1	1.1	1.1	0	0	0	0
REC	0	3.6	3.6	0	0	0	2.7	3.4	0	0	0	0	0	1.7	1.8	1.7	0	0	0	0
F.F	0	3.6	3.6	0	0	0	2.7	3.5	0	0	0	0	0	1.8	1.8	1.8	0	0	0	0
REW	0	3.6	3.6	0	0	0	2.7	3.4	0	0	0	0	0	1.4	1.4	1.5	0	0	0	0
REF. NO.	IC2001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	0	0	0	0	0	0	3.6	3.6	2.2	0	0	0.7	0	0	0	2.2	2.1	2.2	0.1	0
PLAY	0	0	0	0	0	0	3.6	3.6	2.2	0	0	0.7	0	0	0	2.1	2.2	2.2	0.1	0.1
REC	0	0	0	0	0	0	3.6	3.6	2.2	0	0	0.7	0	0	0	2.2	2.1	2.1	0.1	0.1
F.F	0	0	0	0	0	0	3.6	3.6	2.2	0	0	0.7	0	0	0	2.2	0	0	0.6	0
REW	0	0	0	0	0	0	3.6	3.6	3.6	0	0	0.7	0	0	0	2.2	2.2	2.2	0.1	0
REF. NO.	IC2001																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156				
STOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2				
PLAY	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	2.2				
REC	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	2.2				
F.F	2.2	2.2	2.2	2.2	2.2	2.2	0	2.2	2.2	0	0	0	0	0	0	2.2				
REW	0.1	0	0	0.1	0.1	0.1	0.1	0	0.1	0.1	0	0	0	0	0	2.2				
REF. NO.	IC2002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	9.5	2.4	3.2	0.7	1.0	-2.2	3.2	0	3.2	3.2	0	0	9.5	-9.5	3.2	3.2	-9.5	0.8	0	4.0
PLAY	9.5	2.5	3.3	-0.7	1.0	-2.2	3.3	0	3.3	3.3	0	0	9.5	-9.5	3.3	3.3	-9.5	0.8	0	4.0
REC	9.5	2.5	3.3	-0.7	1.0	-2.2	3.3	0	3.3	3.3	0	0	9.5	-9.5	3.3	3.3	-9.5	0.8	0	4.0
F.F	9.5	2.5	3.3	-0.7	1.0	-2.2	3.3	0	3.3	3.3	0	0	9.5	-9.5	3.3	3.3	-9.5	0.8	0	4.0
REW	9.5	2.5	3.3	-0.7	1.0	-2.2	3.3	0	3.3	3.3	0	0	9.5	-9.5	3.3	3.3	-9.5	0.8	0	4.0
REF. NO.	IC2004																			
MODE	1	2	3	4	5	6	7	8												
STOP	0	3.6	3.6	1.7	0	0	0.6	3.7												
PLAY	0	3.6	3.6	1.6	0	0	0.8	3.7												
REC	0	3.6	3.6	1.7	0	0	0.8	3.6												
F.F	0	3.6	3.6	1.7	0	0	0.9	3.7												
REW	0	3.6	3.6	1.7	0	0	0.8	3.7												

REF. NO.	IC2005																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.0	0.8	0	0	3.7	0	3.6	3.7	1.8	1.6	0	0	0	3.7	3.7	0	0	3.7	0	0
PLAY	3.0	0.8	0	0	3.7	0	3.6	3.7	1.8	1.7	0	0	0	3.7	3.7	0	0	3.7	0	0
REC	3.0	0.8	0	0	3.6	0	3.6	3.6	1.8	1.5	0	0	0	3.6	3.6	0	0	3.6	0	0
F.F	3.0	0.8	0	0	3.7	0	3.6	3.7	1.8	1.5	0	0	0	3.7	3.7	0	0	3.7	0	0
REW	3.0	0.8	0	0	3.7	0	3.6	3.7	1.8	1.5	0	0	0	3.7	3.7	0	0	3.7	0	0
REF. NO.	IC2005																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	0	3.7	0	3.7	3.7	0	0	3.7	3.7	3.7	0	0	0	0	0	0
PLAY	0	0	0	0	0	3.7	0	3.7	3.7	0	0	3.7	3.7	3.7	0	0	0	0	0	0
REC	0	0	0	0	0	3.6	0	3.6	3.6	0	0	3.6	3.6	3.6	0	0	0	0	0	0
F.F	0	0	0	0	0	3.7	0	3.7	3.7	0	0	3.7	3.7	3.6	0	0	0	0	0	0
REW	0	0	0	0	0	3.7	0	3.7	3.7	0	0	3.7	3.7	3.7	0	0	0	0	0	0
REF. NO.	IC2005																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	0	0	3.7	0	3.4	3.7	3.7	0	3.6	3.7	3.3	0	0	0	2.1
PLAY	0.1	0	0	0	0	0	0	3.7	0	3.4	3.7	3.7	0	3.6	3.7	3.3	0	0.1	0	2.1
REC	0	0	0	0	0	0	0	3.6	0	3.4	3.6	3.6	0	3.6	3.6	3.3	0	0	0	2.1
F.F	0	0	0	0	0	0	0	3.7	0	3.4	3.7	3.7	0	3.6	3.7	3.3	0	0	0	2.1
REW	0	0	0	0	0	0	0	3.7	0	3.4	3.7	3.7	0	3.6	3.7	3.3	0	0	0	2.1
REF. NO.	IC2005																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	0	0	3.7	3.7	0	0	0	0	0	0	0	1.5	0	0	3.5	3.6	0	3.3	0.1
PLAY	0	0	0	3.7	3.7	0	0	0	0	0	0	0.1	1.5	0	0	3.5	3.6	0	3.3	0.1
REC	0	0	0	3.6	3.6	0	0	0	0	0	0	0	1.5	0	0	3.5	3.6	0	3.3	0.1
F.F	0	0	0	3.7	3.7	0	0	0	0	0	0	0	1.5	0	0	3.5	3.6	0	3.3	0.1
REW	0	0	0	3.7	3.7	0	0	0	0	0	0	0	1.5	0	0	3.5	3.6	0	3.3	0.1
REF. NO.	IC2006																			
MODE	1	2	3	4	5															
STOP	3.7	0	1.2	3.3	5.2															
PLAY	3.7	0	1.2	3.3	5.1															
REC	3.7	0	1.2	3.3	5.1															
F.F	3.7	0	1.2	3.3	5.1															
REW	3.7	0	1.2	3.3	5.1															
REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	2.7	0	0	3.6	0	3.6	0	0	0	0	3.6	3.6	3.6	0	0	3.6	1.8
PLAY	0	0	0	2.7	0	0	3.6	0	3.6	3.6	0	0	3.6	3.6	3.6	3.6	0	0	3.6	1.8
REC	0	0	0	2.6	0	0	3.6	0	3.6	0	0	3.6	3.6	0	3.6	3.6	0	0	3.6	1.8
F.F	0	0	0	2.7	0	0	3.6	0	3.6	0	0	0	3.6	3.6	3.6	3.6	0	0	3.6	1.8
REW	0	0	0	2.6	0	0	3.6	0	3.6	0	0	0	0	3.6	3.6	3.6	0	0	3.6	1.8
REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	1.8	0	0	3.6	0.1	0	0	0	0	0	0	3.6	0	0	0	0	0	0	3.6	0
PLAY	1.7	0	0	3.6	0.1	0	0	3.6	0	0	0	3.6	0	0	0	0	3.6	3.6	3.6	0
REC	1.8	0	0	3.6	0.1	0	0	3.6	0	0	0	3.6	0	0	0	0	3.6	3.6	3.6	0
F.F	1.2	0	0	3.6	0.1	0	0	0	0	0	0	3.6	0	0	0	0	3.6	3.6	3.6	0
REW	1.7	0	0	3.6	0.1	0	0	0	0	0	0	3.6	0	0	0	0	3.6	3.6	3.6	3.6
REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	3.6	0	3.6	3.6	0	0	0	0	3.6	3.6	1.8	3.6	0	3.4	0	1.5	0	0	3.3	3.3
PLAY	3.6	0	3.6	3.6	0.5	0.4	0.4	0.4	3.6	0	0	3.6	0	0	1.7	1.8	1.5	1.6	1.7	1.7
REC	3.6	0	3.6	3.6	0.4	0.3	0.4	0.4	3.6	0	0	3.6	0	1.7	1.8	1.5	1.5	1.6	1.7	1.7
F.F	3.6	0	3.6	3.6	0.4	0.4	0.4	0.4	3.6	1.8	1.8	3.6	0	1.7	0	1.5	1.5	0	1.6	1.6
REW	3.6	0	3.6	3.6	3.6	0.3	0.4	0.4	3.6	0	1.8	3.6	0	1.7	0	1.5	1.5	0	1.6	1.6
REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	0	0	1.5	0	3.6	0	0	3.6	0	3.7	3.6	3.6	3.6	3.6	0	3.6	3.6	3.7	0
PLAY	0	0	0	1.5	0	3.6	0	0	3.3	1.0	3.3	3.6	3.6	1.5	3.6	0	3.3	2.9	3.6	0
REC	0	0	0	1.5	1.5	3.6	0	0	3.3	1.0	3.2	3.6	3.6	1.8	3.6	0	3.3	2.8	3.6	0
F.F	0	0	0	1.5	0	3.6	0	0	3.3	3.3	3.3	3.6	3.6	3.6	3.6	0	2.8	2.8	3.6	0
REW	0	0	0	1.5	0	3.6	0	0	3.3	1.0	3.3	3.6	1.1	3.6	2.6	0	3.3	2.8	3.6	0
REF. NO.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	3.6	3.6	3.7	3.6	0	3.7	3.7	3.7	3.7	0	0	0	3.6	1.8	0	1.8	3.7	3.7	0	3.6
PLAY	3.1	3.0	3.5	3.6	0	0	0	3.7	0	0	0	1.9	1.6	0.3	0.1	1.8	3.7	3.7	0.1	1.8
REC	3.1	3.0	3.5	3.6	0	0	0	3.6	3.6	0	0	0	1.9	0.2	0.1	1.8	3.6	3.7	3.7	1.8
F.F	3.1	3.1	3.5	3.6	0	0	0	0	0	0	0	1.9	1.8	0.7	0	1.8	3.6	3.7	0.1	1.8
REW	3.1	3.0	3.5	3.6	0	3.7	3.7	3.7	0	0	0	1.9	1.8	0	0.4	1.8	3.7	3.7	0.1	1.8

REF. NO.	IC6001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	0	0	3.6	3.3	0	3.3	0	0	0	0	0	0	0	1.8	3.6	3.6	0	0	0	3.3
PLAY	0	3.6	1.6	1.7	1.6	1.6	1.6	1.6	0	0	0	0	0	1.8	3.6	3.6	0	0	0	2.7
REC	0	3.6	1.7	1.6	1.6	1.7	1.6	1.6	0	0	0	0	0	1.8	3.6	3.6	0	0	0	2.7
F.F	0	3.6	1.6	1.6	1.6	1.6	0	3.3	0	0	0	0	0	1.8	3.6	3.6	0	0	0	2.1
REW	0	3.6	1.6	1.6	1.6	1.6	2.9	3.3	0	0	0	0	0	1.8	3.6	3.6	0	0	0	1.0

REF. NO.	IC6001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	0	0	0	3.7	3.7	3.7	3.6	3.6	3.6	0	0	2.5	2.2	0	3.0	3.6	3.6	3.6	1.7	1.7
PLAY	0.1	0.1	0.1	3.7	3.7	3.7	3.6	3.6	3.6	0	0	2.3	0	0	0	3.6	3.6	3.6	1.6	1.6
REC	0	0	0	3.7	3.7	3.7	3.6	3.6	3.6	0	0	2.2	0	0	0	3.6	3.6	3.6	1.7	1.7
F.F	0.1	0	0	3.7	3.7	3.7	3.6	3.6	3.6	0	0	2.2	0	0	0	3.6	3.6	3.6	1.6	1.6
REW	0.1	0.1	0	3.7	3.7	3.7	3.6	3.6	3.6	0	0	2.2	0	0	0	3.6	3.6	3.6	1.7	1.6

REF. NO.	IC6001																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156				
STOP	1.7	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0	3.6				
PLAY	1.5	1.6	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.5	1.5	1.5	1.6	1.6	0	3.6				
REC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0	3.6				
F.F	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.7	1.7	1.7	1.6	0	3.6				
REW	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0	3.6				

REF. NO.	IC6002																			
MODE	1	2	3	4	5															
STOP	2.7	3.6	0	0	3.4															
PLAY	2.7	3.6	0	0	3.4															
REC	2.7	3.6	0	0	3.4															
F.F	2.7	3.6	0	0.9	3.4															
REW	2.7	3.6	0	0.9	3.4															

REF. NO.	IC6003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	3.7	0	0	0	3.3	0	0	0	3.3	0	3.3	0	3.7	3.7						
PLAY	0	3.7	1.7	0	1.6	0	0	0	1.6	0	1.6	3.7	0	3.7						
REC	0	3.7	1.6	0	1.6	0	0	0	1.6	0	1.6	3.7	0	3.7						
F.F	0	3.7	1.5	0	1.5	0	0	0	1.5	0	1.6	3.7	0	3.7						
REW	3.7	0	1.5	0	1.5	0	0	0	1.6	0	1.6	0	3.7	3.7						

REF. NO.	IC6004										IC6005									
MODE	1	2	3	4	5	6	7	8			1	2	3	4	5					
STOP	0	0	0	0	3.6	3.7	3.7	3.7			0	0	0	0	3.7					
PLAY	1.6	1.6	0	0	3.7	3.7	3.7	3.7			1.6	1.6	0	1.8	3.7					
REC	1.6	1.6	0	0	3.7	3.7	3.7	3.7			1.6	1.6	0	1.8	3.7					
F.F	3.3	0	3.7	0	0	3.7	3.7	3.7			0	0	0	0	3.7					
REW	0	3.3	0	0	3.7	3.7	3.7	3.7			0	3.3	0	3.7	3.7					

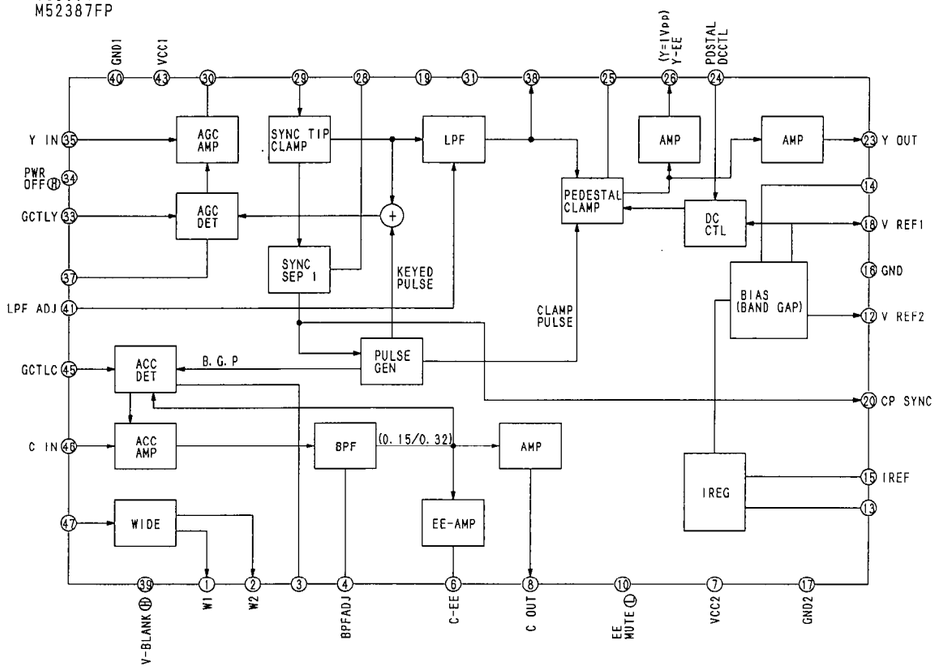
REF. NO.	IC6006																			
MODE	1	2	3	4	5	6	7	8												
STOP	1.8	1.8	1.8	0	0	0	0	3.6												
PLAY	1.8	1.8	1.8	0	0	0	0	3.6												
REC	1.8	1.8	1.8	0	0	0	0	3.6												
F.F	1.8	1.8	1.8	0	0	0	0	3.6												
REW	1.8	1.8	1.8	0	0	0	0	3.6												

LSI/SYSTEM CONTROL & SERVO TRs DC VOLTAGE CHART (Mini DV : SP MODE)

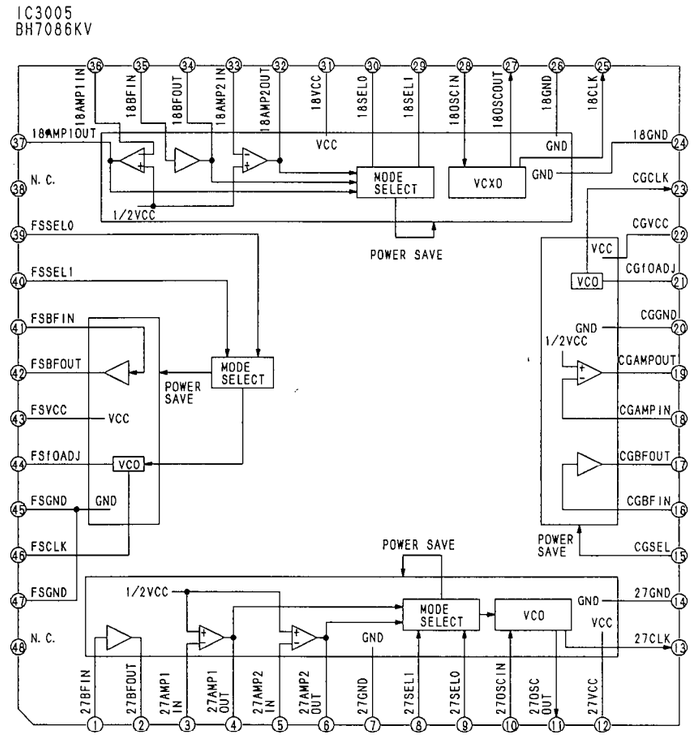
REF. NO.	Q6001																			
MODE	E	C	B																	
STOP	3.7	3.7	3.6																	
PLAY	3.7	3.7	3.6																	
REC	3.7	3.7	3.6																	
F.F	3.7	3.7	3.6																	
REW	3.6	3.7	3.6																	

REF. NO.	QR2001			QR6001																
MODE	E	C	B	F	C	B														
STOP	3.7	0	3.6	0	3.4	0														
PLAY	3.7	0	3.6	0	3.4	0														
REC	3.7	0	3.6	0	3.4	0														
F.F	3.7	0	3.6	0	3.4	0														
REW	3.7	0	3.6	0	3.4	0														

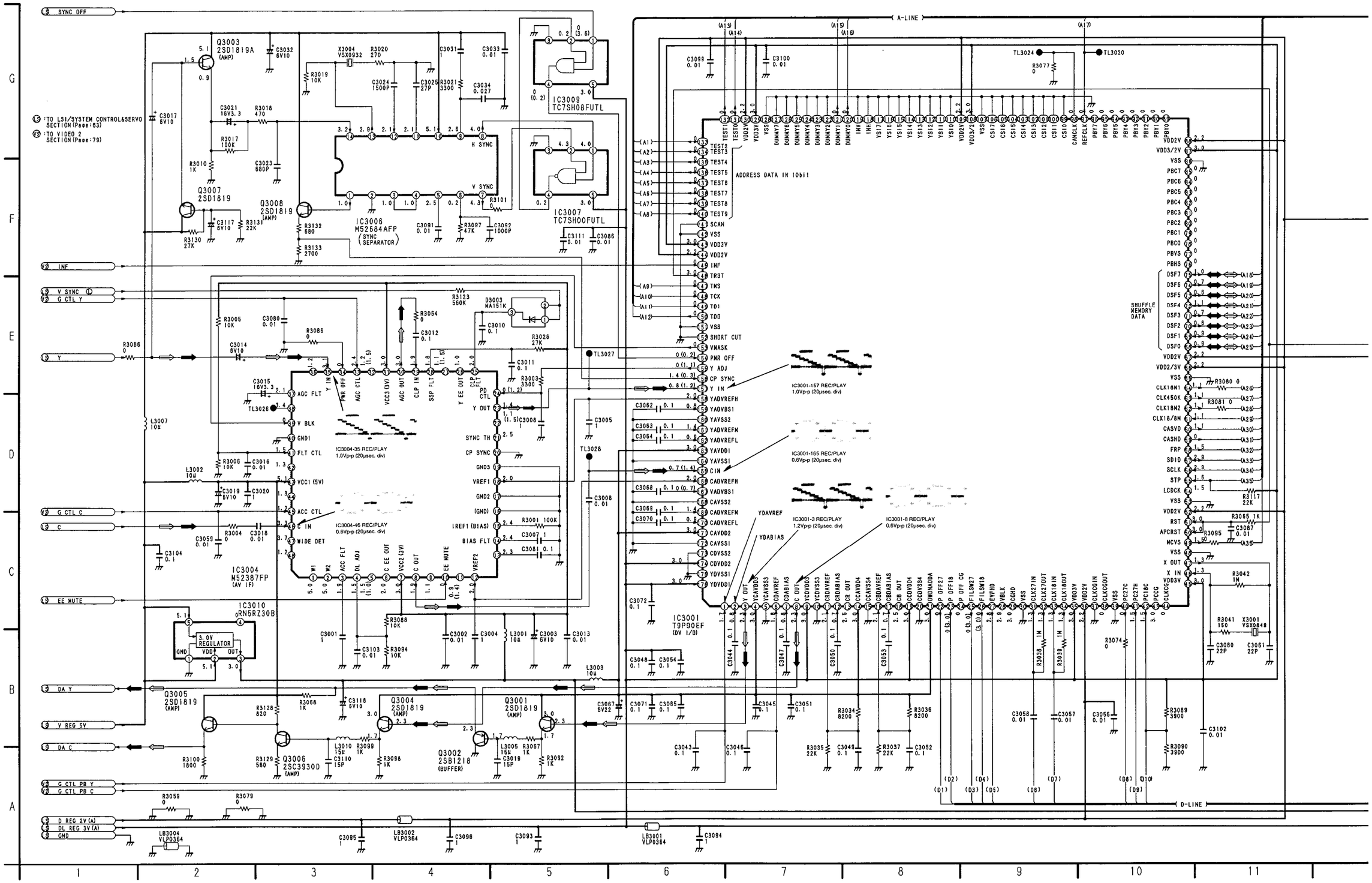
IC3004
M52387FP

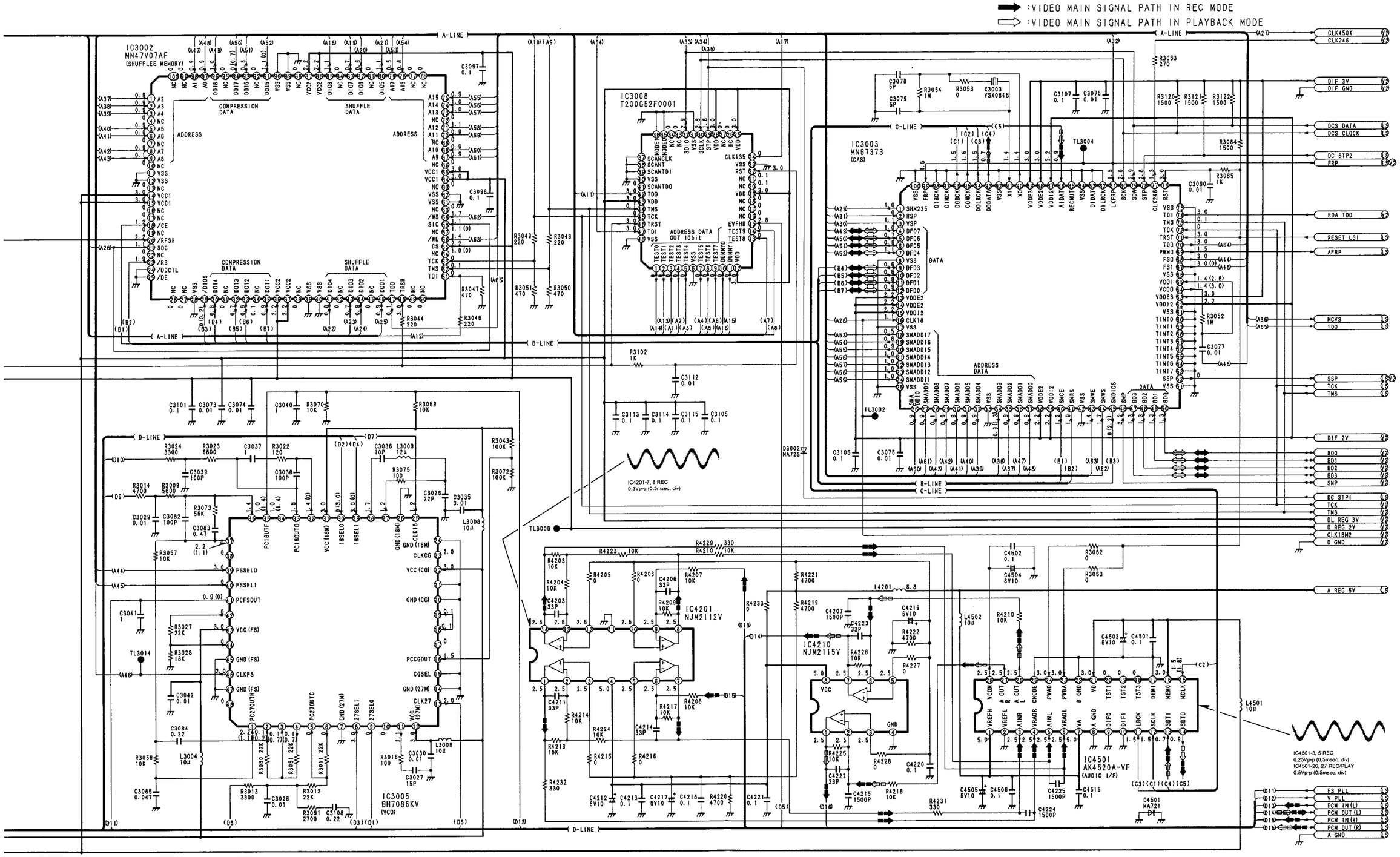


IC3005
BH7086KV



3-22. VIDEO 1 SECTION IN DIGITAL SCHEMATIC DIAGRAM





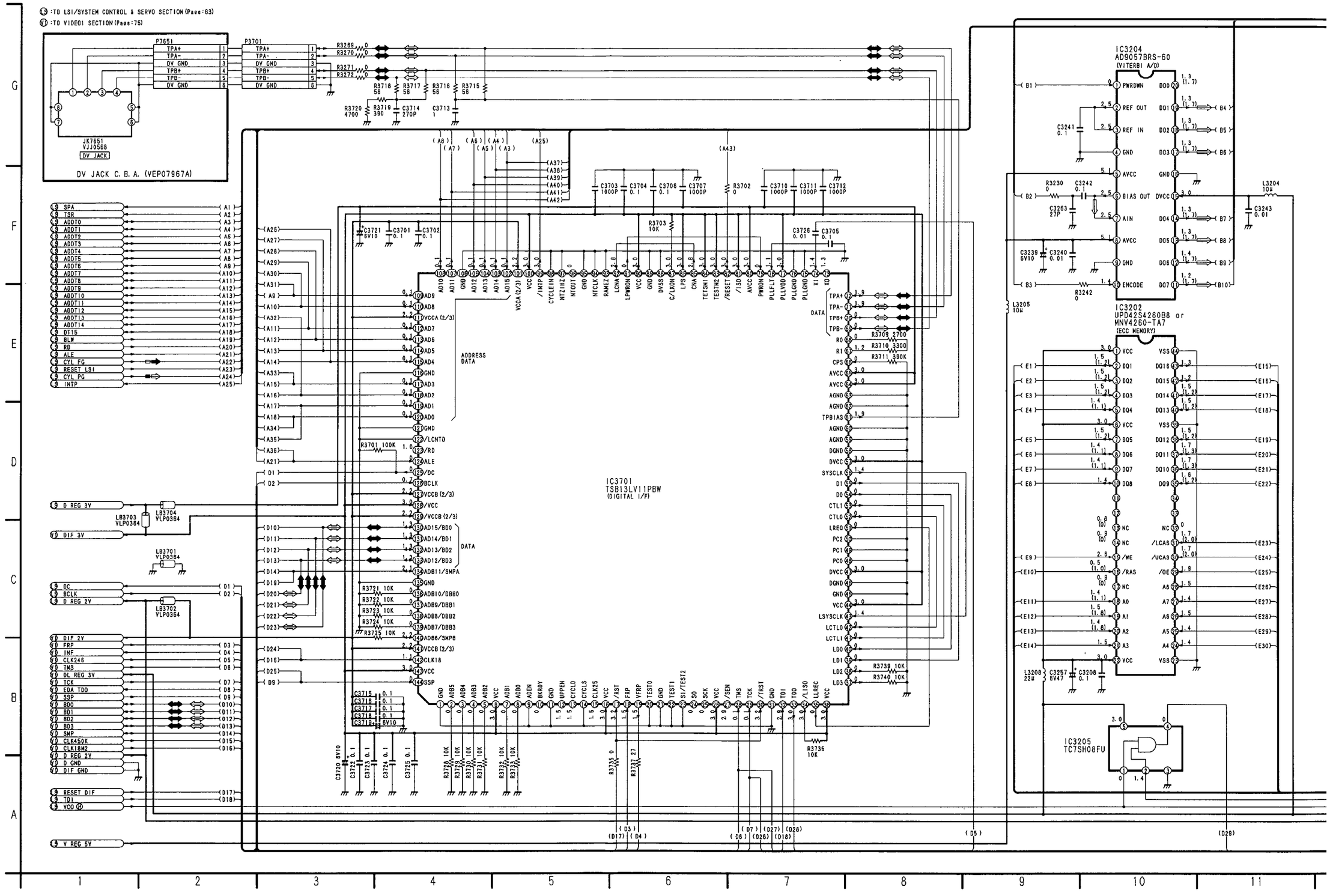
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE)

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22

3-23. VIDEO 2 SECTION IN DIGITAL, DV JACK SCHEMATIC DIAGRAMS



:VIDEO MAIN SIGNAL PATH IN REC MODE
:VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
:CYLINDER SERVO SPEED LOOP
:CYLINDER SERVO PHASE LOOP

IC3201
M65500FP
(EDA IC)

IC3207
M62370
(D/A)

IC3201-131 REC/PLAY
4.2Vp-p (0.5msec. div)

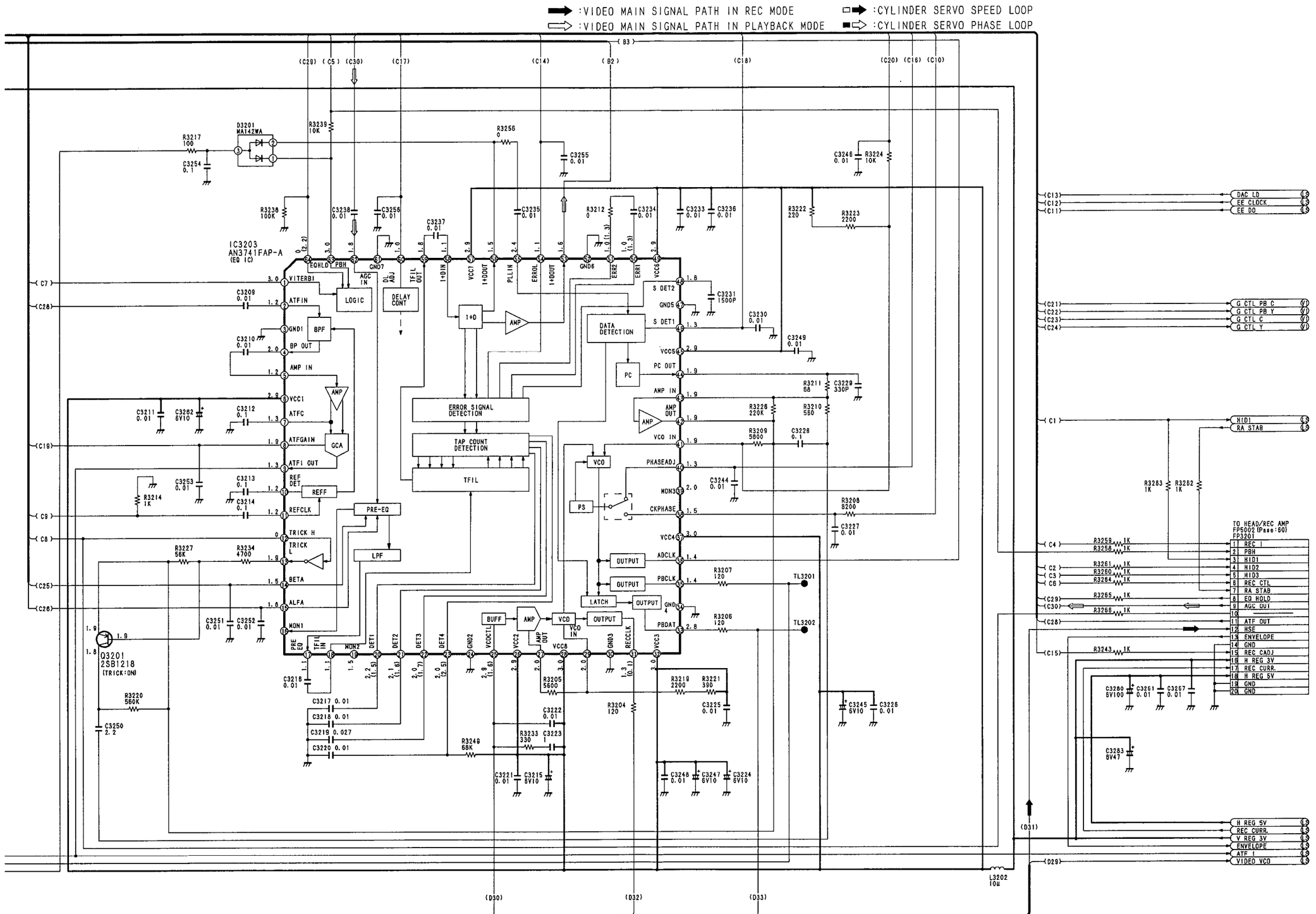
IC3201-132 REC/PLAY
4.2Vp-p (2msec. div)

ADDRESS DATA

DATA

ADDRESS

MEMORY DATA



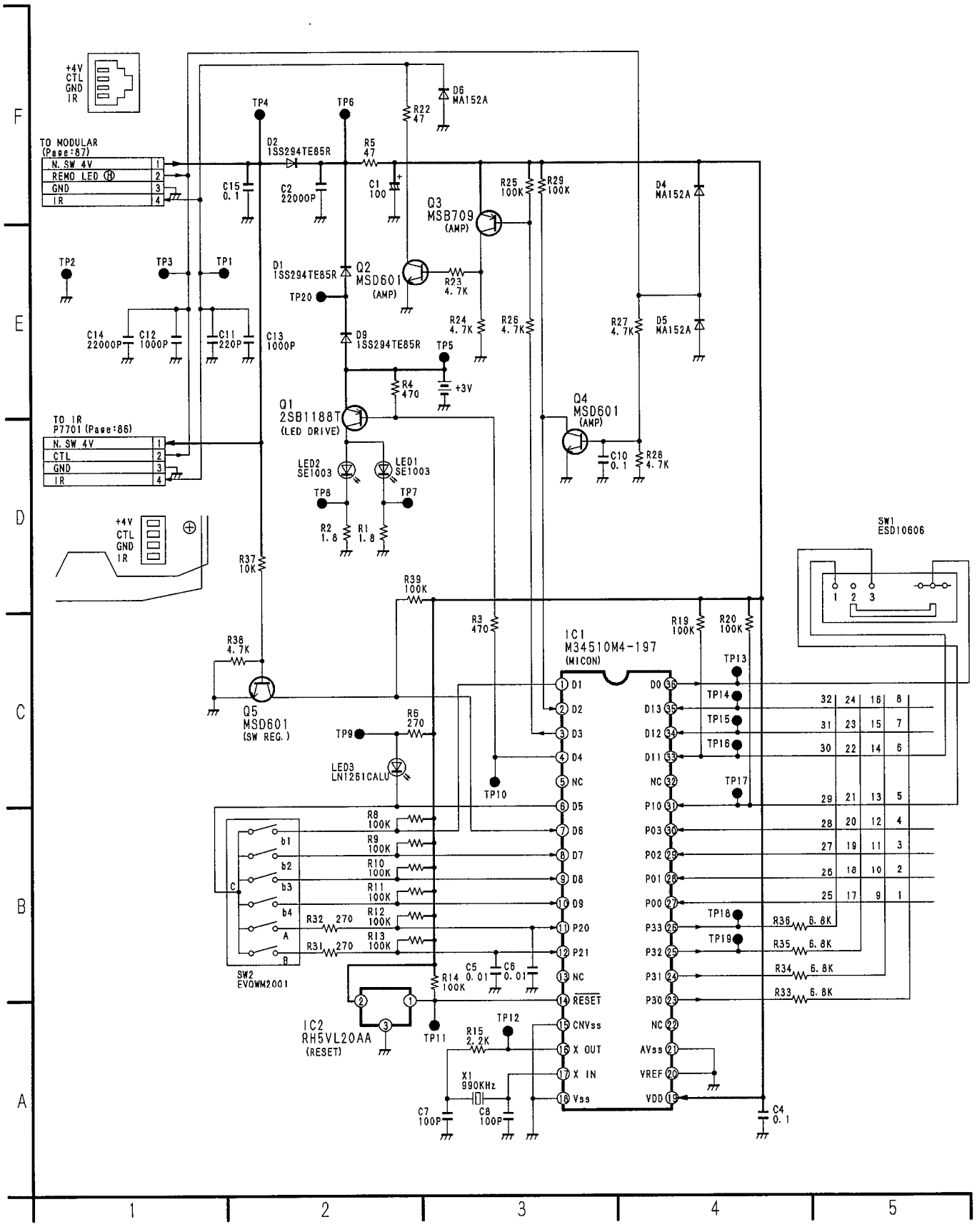
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE)

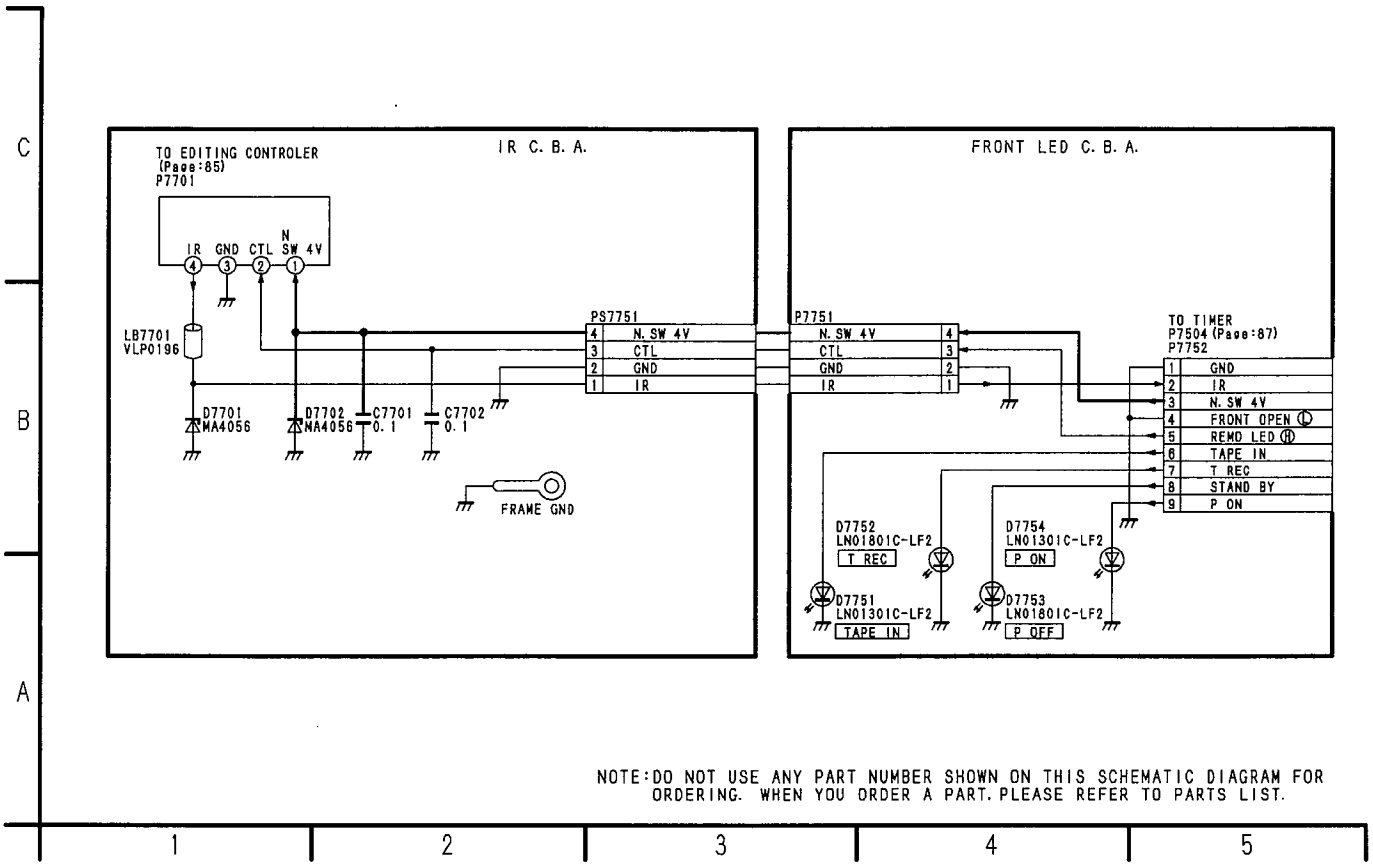
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

23 24 25 26 27 28 29 30 31 32 33

3-24. EDITING CONTROLLER SCHEMATIC DIAGRAM



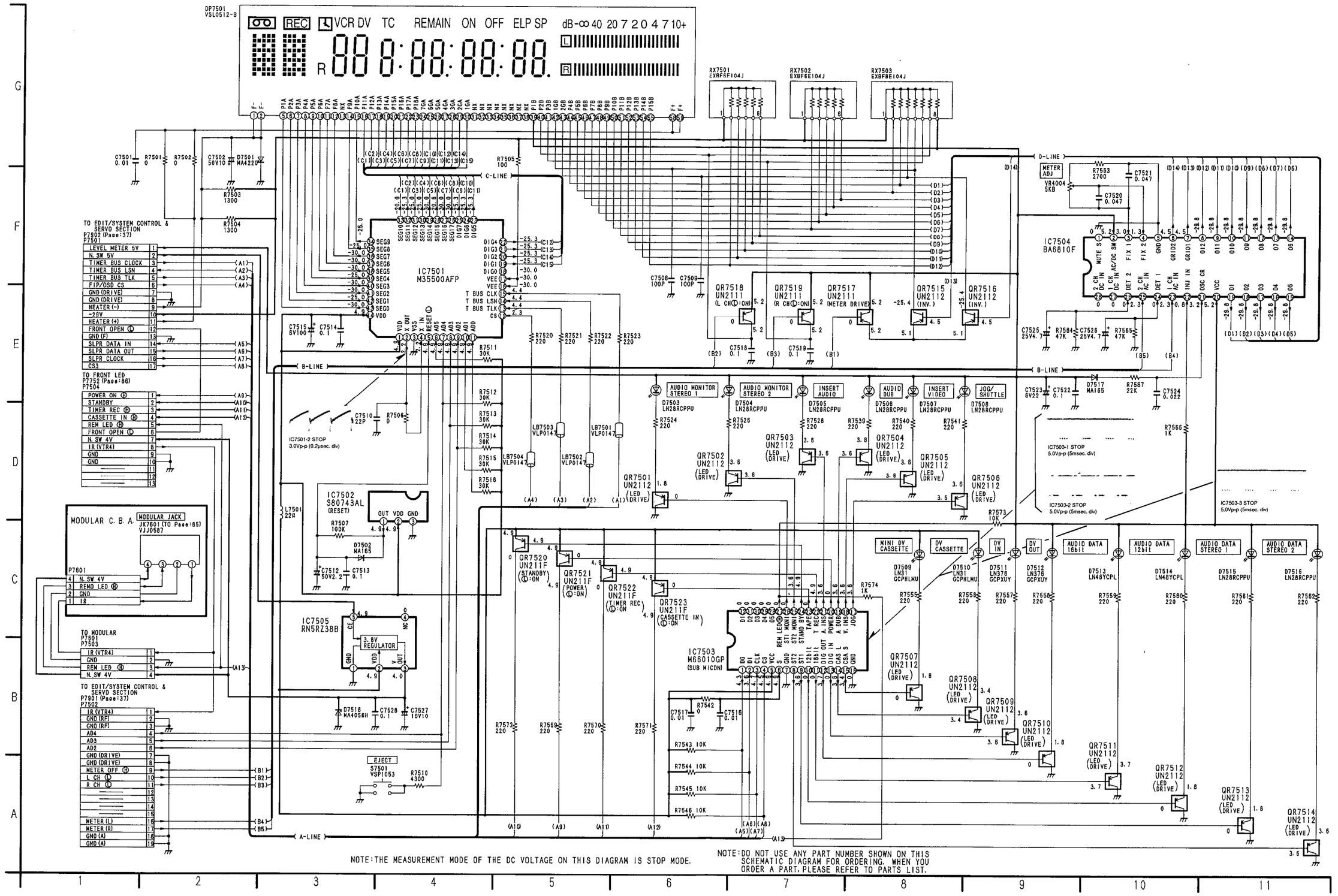
3-25. IR, FRONT LED SCHEMATIC DIAGRAMS



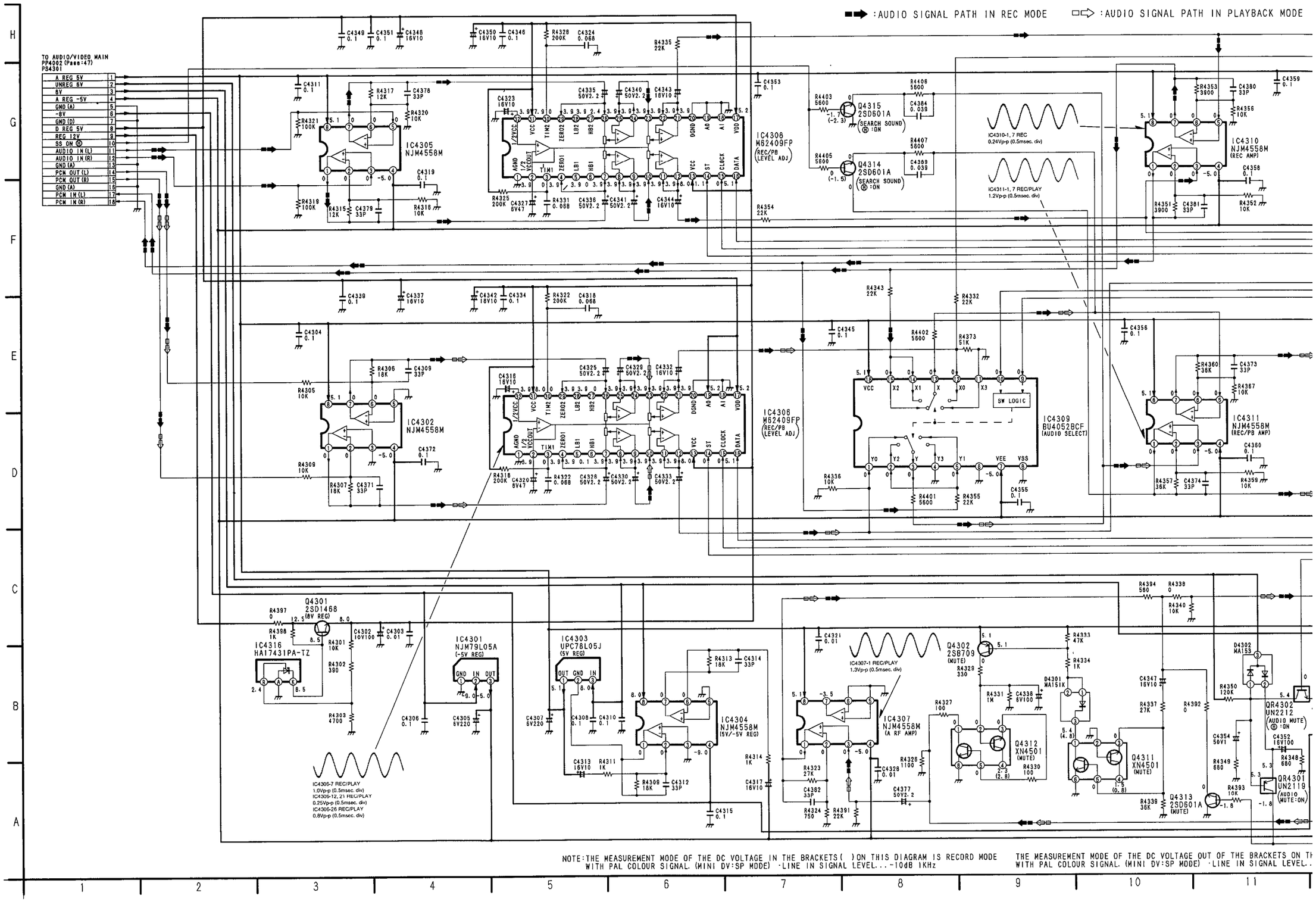
IC7503 (M66010GP): SUB MICON

PIN. NO.	SIGNAL NAME	I/O	EXPLANATION	PIN. NO.	SIGNAL NAME	I/O	EXPLANATION
1	DO	O	Serial Data	17	EDIT	O	LED ON Edit
2	DI	I	Serial Data	18	V INS	O	LED ON Video Insert
3	CLK	I	Serial Clock	19	A DUB	O	LED ON Audio Dubbing
4	CS	I	I/O Chip Select	20	POWER	O	LED ON Power
5	VCC	I		21	A INS	O	LED ON Audio Insert
6	—	I		22	T REC	O	LED ON Timer Rec
7	GND	—		23	TAPE	O	LED ON Cassette In
8	ST2	O	LED ON Data Stereo 2	24	STAND BY	O	LED ON Stand By
9	ST1	O	LED ON Data Stereo 1	25	ST2 MONI	O	LED ON Monitor Stereo 2
10	12bit	O	LED ON 12 Bit	26	ST1 MONI	O	LED ON Monitor Stereo 1
11	16bit	O	LED ON 16 Bit	27	REM LED	O	LED ON
12	DIG OUT	O	LED ON DV Output	28	—	O	
13	DIG IN	O	LED ON DV Input	29	—	—	
14	CAS L	O	LED Normal Cassette	30	—	—	
15	CAS S	O	LED On Mini Cassette	31	—	—	
16	GND	—		32	—	—	

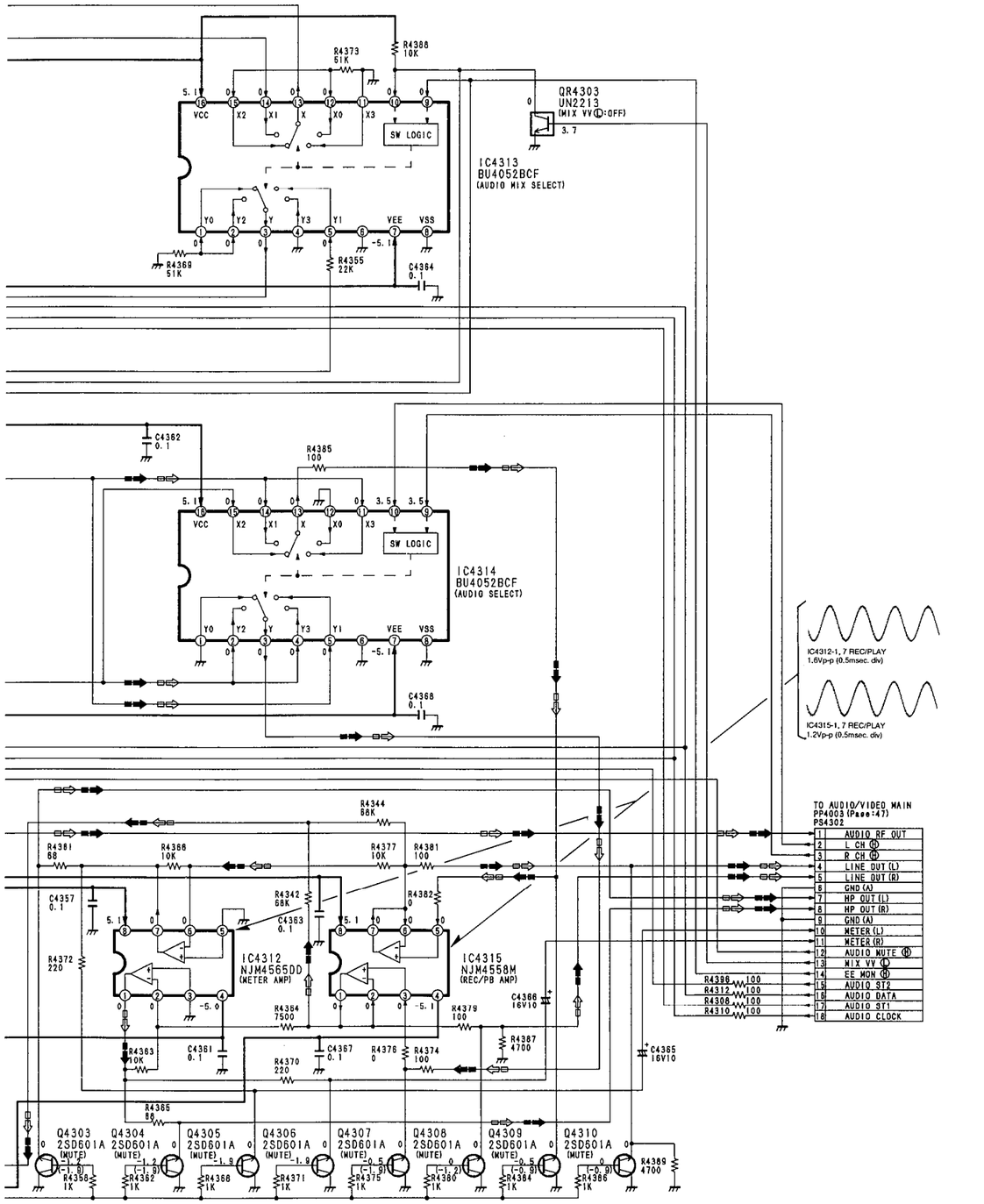
3-26. TIMER, MODOLAR SCHEMATIC DIAGRAMS



3-27. AUDIO SCHEMATIC DIAGRAM



:AUDIO SIGNAL PATH IN REC MODE　:AUDIO SIGNAL PATH IN PLAYBACK MODE

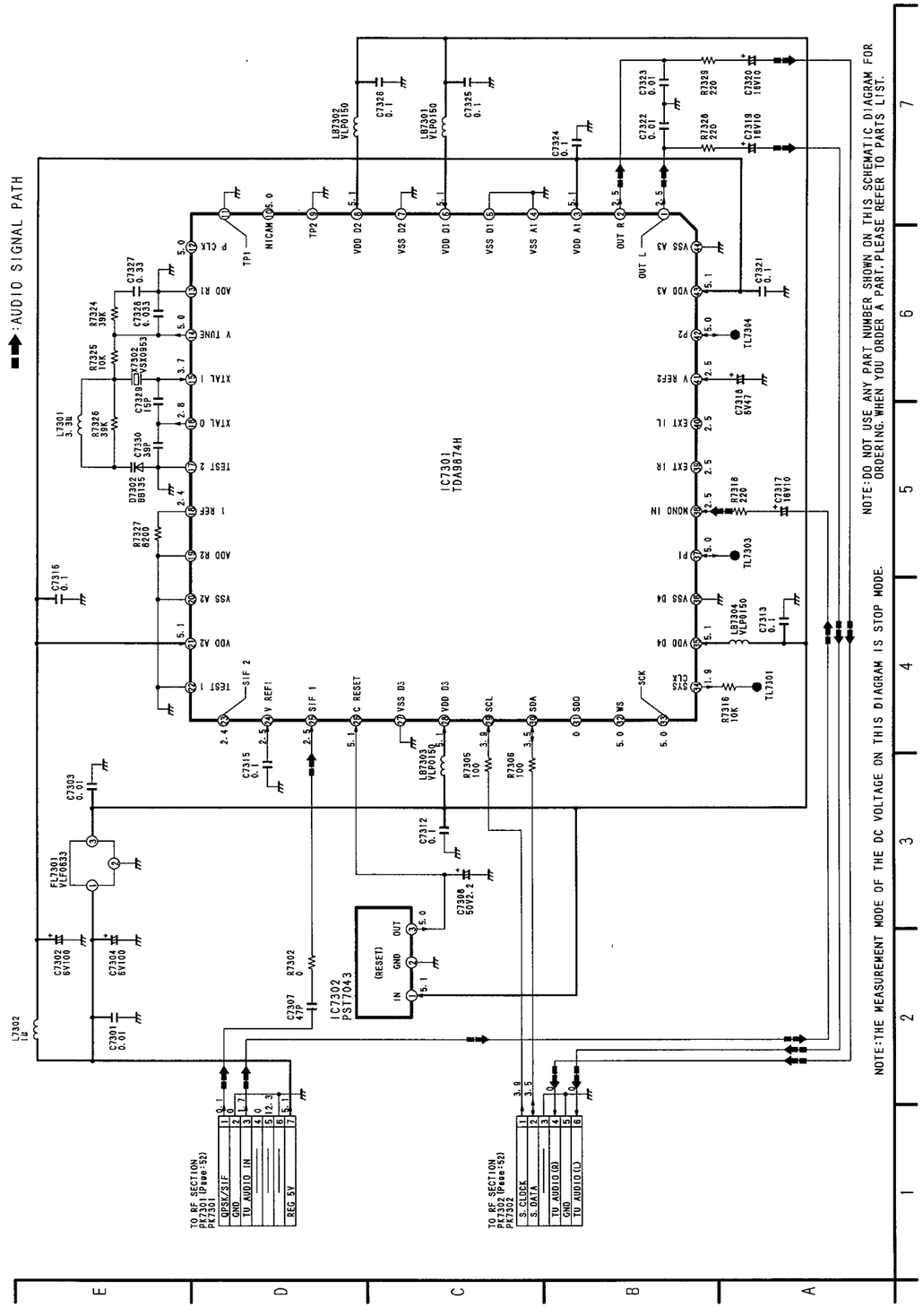


'BACK MODE

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

12 13 14 15 16 17

3-28. NICAM DECODER SCHEMATIC DIAGRAM



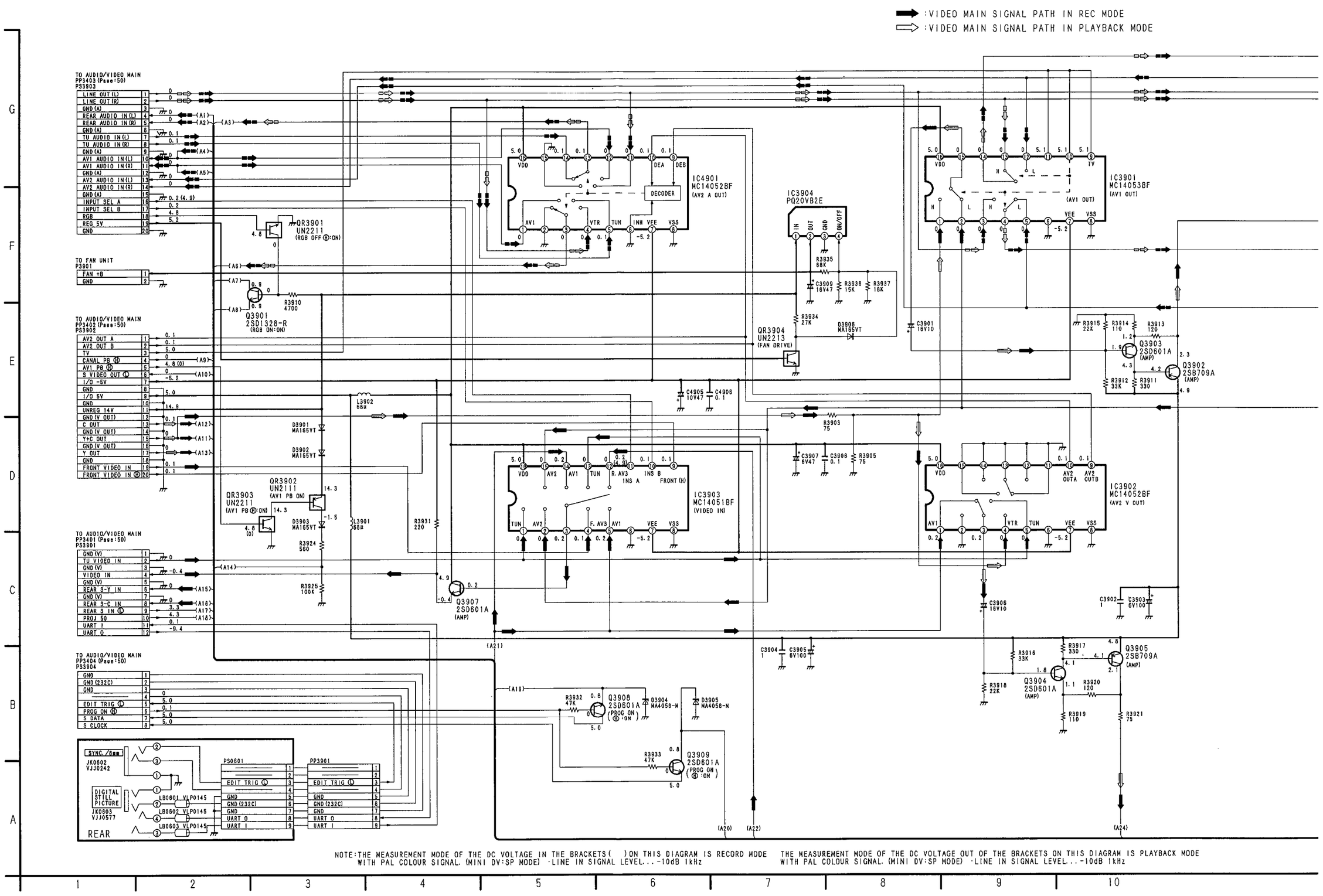
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

7 6 5 4 3 2 1

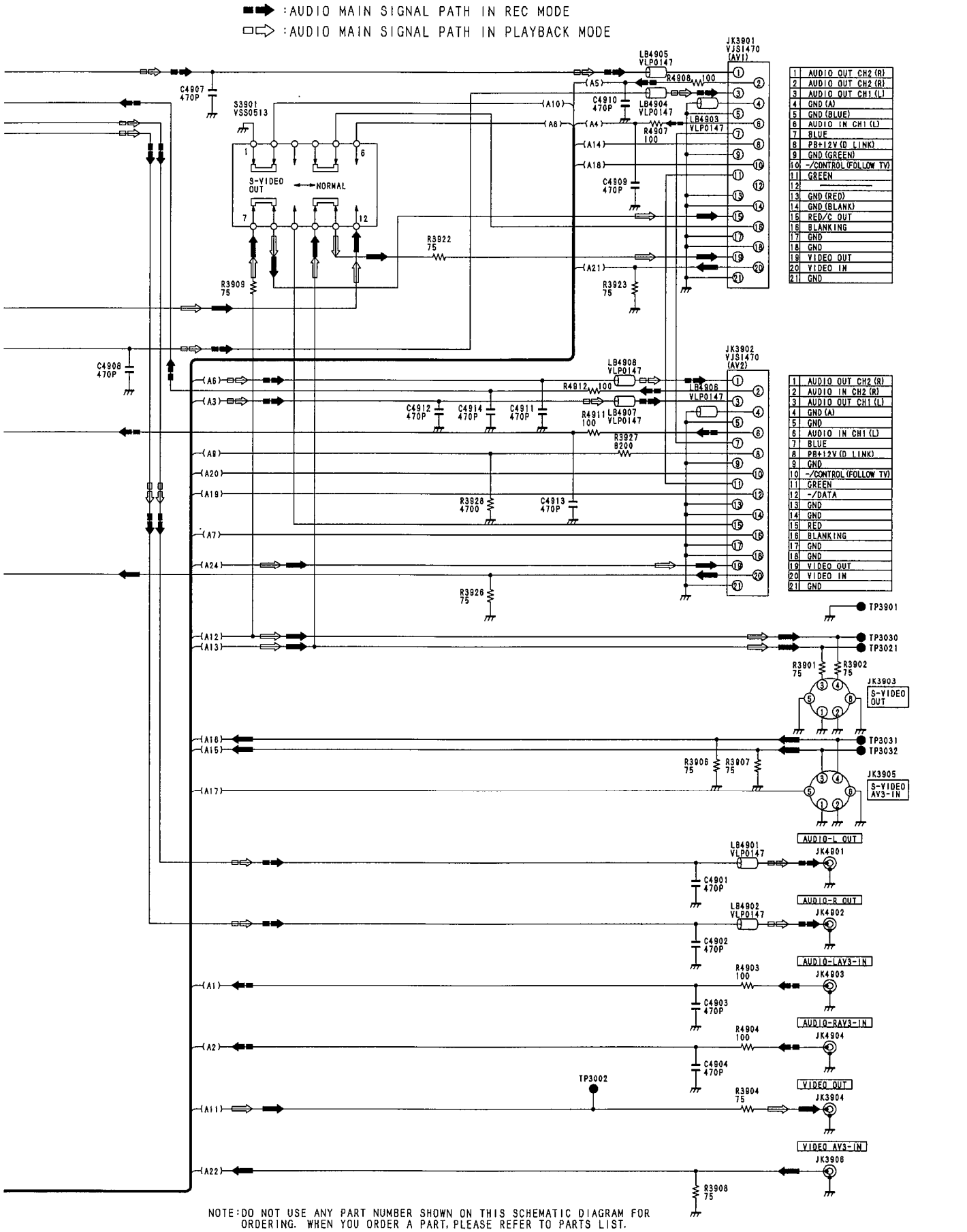
E D C B A

3-29. INPUT/OUTPUT, REAR JACK SCHEMATIC DIAGRAMS



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE) ·LINE IN SIGNAL LEVEL...-10dB 1kHz

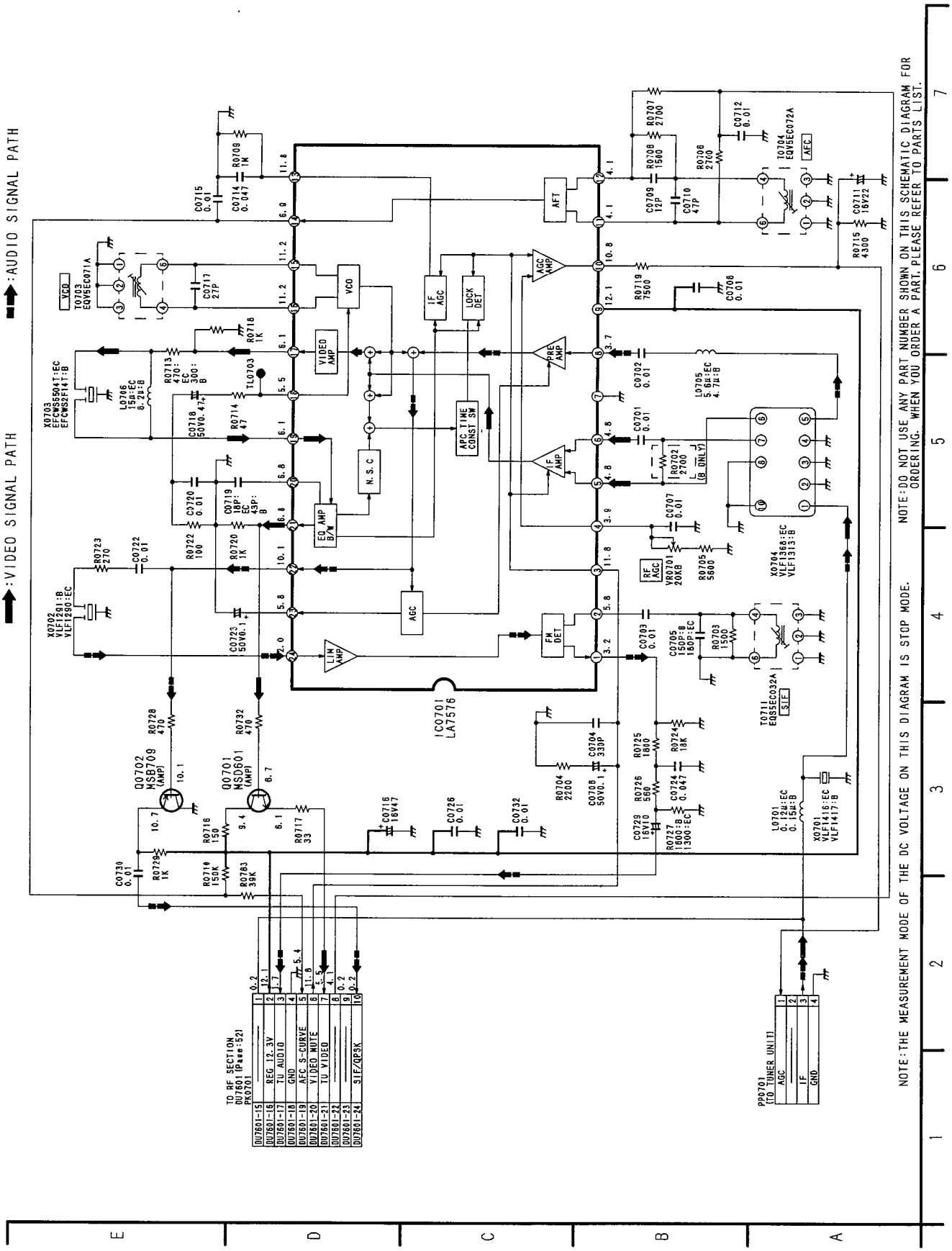
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (MINI DV:SP MODE) ·LINE IN SIGNAL LEVEL...-10dB 1kHz



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

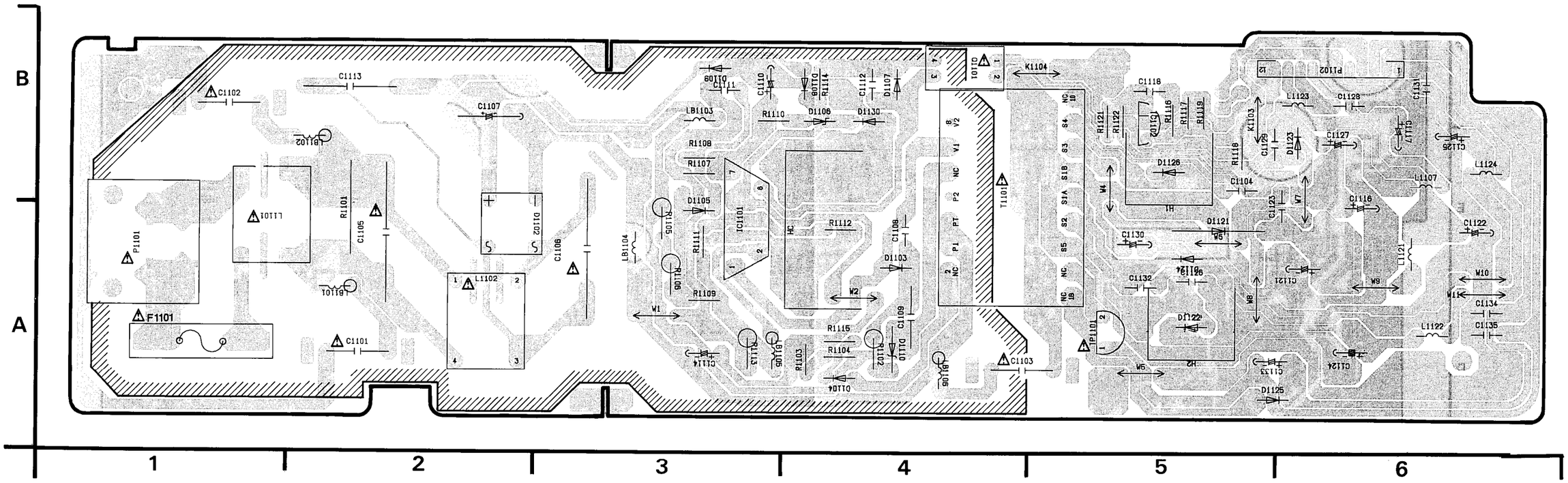
11	12	13	14	15

3-30. TV DEMODULATOR SCHEMATIC DIAGRAM



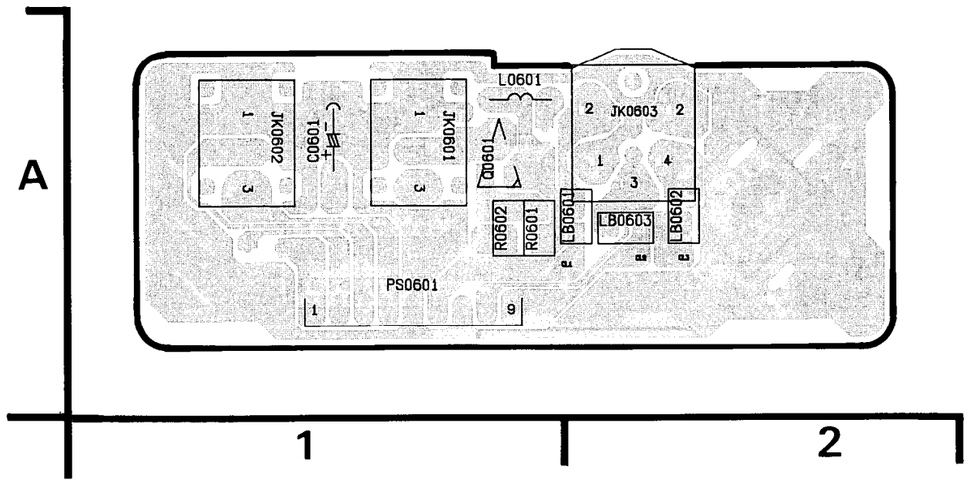
3-31. POWER SUPPLY C.B.A. (VEP01814A)

CAUTION THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

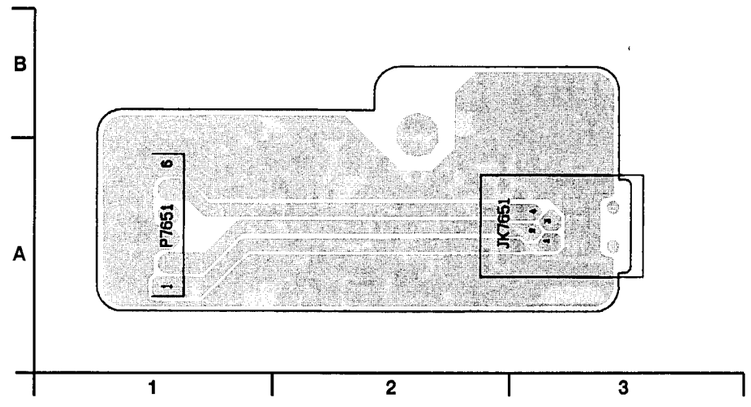


3—97

3-32. REAR JACK C.B.A. (VEP03E29A)

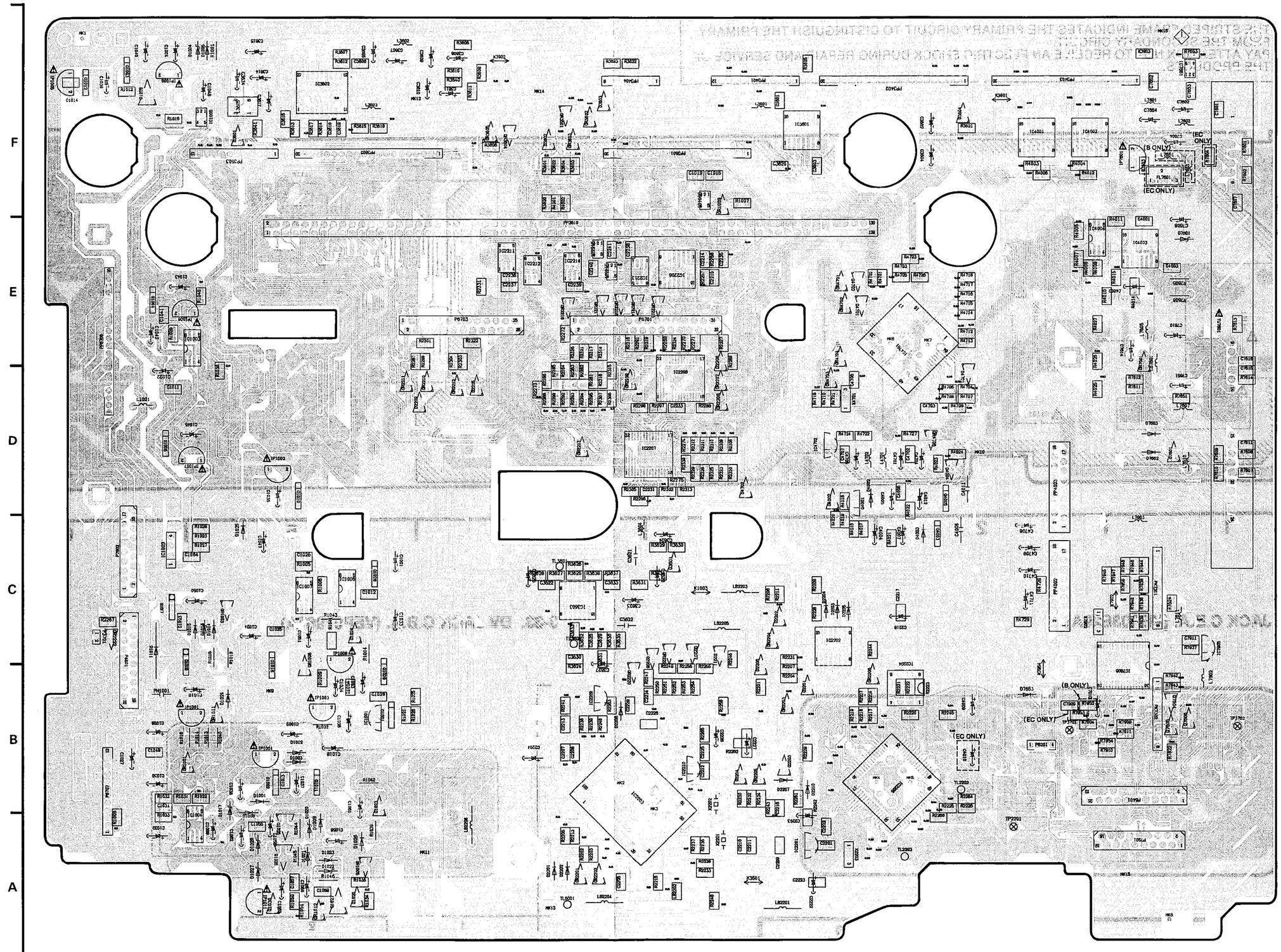


3-33. DV JACK C.B.A. (VEP07967A)



3—98

3-34. MAIN C.B.A. (VEP06C40B: NV-DV10000B) (VEP06C40A: NV-DV10000EC)



3-35. FRONT (L) C.B.A. (VEP04695B)

MAIN C.B.A.

Transistor	
Q1001	B-3
Q1002	B-2
Q1003	F-1
Q1004	E-1
Q1005	D-1
Q1008	F-1
Q1009	C-2
Q1010	D-2
Q1011	B-2
Q1012	F-1
Q1017	C-1
Q1018	C-2
Q1020	A-3
Q1023	B-3
Q1024	C-3
Q1025	A-2
Q1026	A-2
Q1027	A-3
Q1028	C-3
Q1029	B-3
Q1030	A-2
Q2201	B-6
Q2202	C-6
Q2203	B-6
Q2204	B-5
Q2205	D-3
Q2206	C-5
Q2207	C-5
Q2208	E-5
Q3601	C-5
Q4001	D-6
Q4002	D-6
Q4003	C-7
Q4004	D-7
Q4005	D-7
Q4701	E-6
Q4702	E-6
Q7601	D-8
Q7604	B-8
Q7605	B-8
Q7606	B-8

Transistor & Resistor	
QR1001	B-2
QR1003	C-2
QR1005	A-3
QR1008	C-2
QR1009	F-5
QR1011	B-2
QR1012	A-2
QR2201	A-4
QR2202	A-4
QR2203	B-6
QR2204	C-5
QR2205	B-5
QR2206	B-6
QR2207	D-5
QR2208	D-5
QR2209	D-5
QR2210	D-3
QR2211	D-3
QR2212	D-3
QR2213	D-4
QR2214	E-5
QR2215	E-5
QR2216	E-4
QR2217	E-4
QR2218	E-4
QR2220	B-5
QR2221	C-5
QR2222	C-1
QR3601	F-4
QR3602	F-4
QR3603	F-4
QR3604	F-4
QR3605	F-4
QR4701	E-6
QR4702	E-6
QR4703	D-6
QR4704	E-6
QR4706	D-7
QR7601	D-8

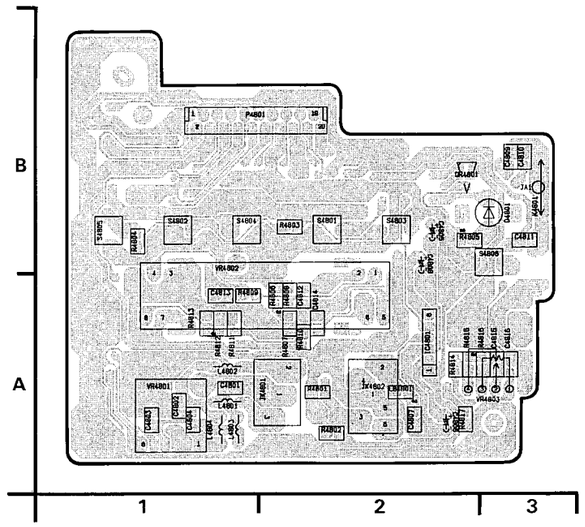
Integrated Circuit	
IC1001	B-3
IC1003	E-2
IC1004	A-2
IC1005	F-2
IC1006	C-3
IC1007	C-2
IC1008	F-5
IC1009	C-1
IC2201	A-6
IC2202	C-6
IC2203	B-5
IC2204	B-6
IC2205	B-6
IC2206	E-5
IC2207	D-5
IC2208	D-5
IC2209	B-4
IC2210	B-5
IC2211	E-4
IC2212	E-4
IC2213	E-5
IC2214	E-4
IC2215	E-4
IC2216	E-4
IC3601	F-6
IC3602	F-2
IC3603	C-4
IC4001	F-7
IC4002	F-7
IC4003	F-7
IC4004	E-8
IC4701	E-6
IC4702	D-6
IC7651	F-8
IC7905	C-8
IC7906	B-8

IP	
IP1001	B-2
IP1002	D-2
IP1003	B-2
IP1004	B-2
IP1005	F-1
IP1006	E-2
IP1007	D-2
IP1008	C-3
IP1009	F-1
IP1011	A-2
IP7601	F-8

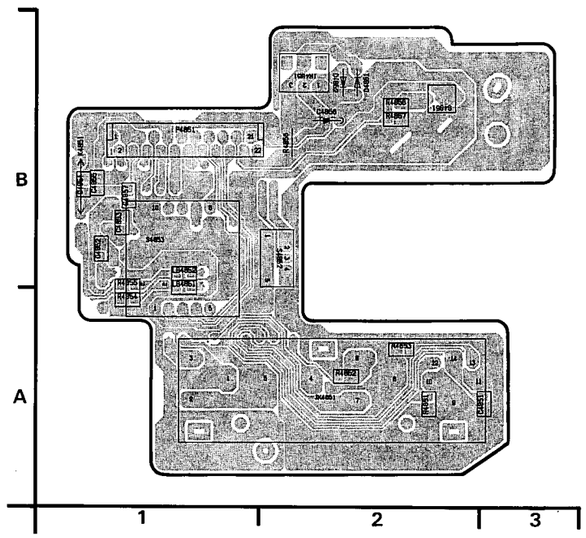
Test Point	
TL2202	B-7
TL2203	A-6
TL3601	C-4
TL3602	C-4
TL6001	A-4
TP2201	A-7
TP3701	B-7
TP3702	B-9

Connector	
P3701	C-1
P4001	C-1
P6201	B-7
P6401	B-8
P6701	E-5
P6703	E-3
P6707	B-1
P7901	A-8
P7902	C-1
PK7301	C-8
PK7302	B-8
PP3401	F-5
PP3402	F-6
PP3403	F-7
PP3404	F-5
PP3501	F-5
PP3502	F-3
PP3503	F-2
PP3610	E-4
PP4002	C-7
PP4003	D-7
PP6706	E-1
TU7601	E-8

ADDRESS INFORMATION

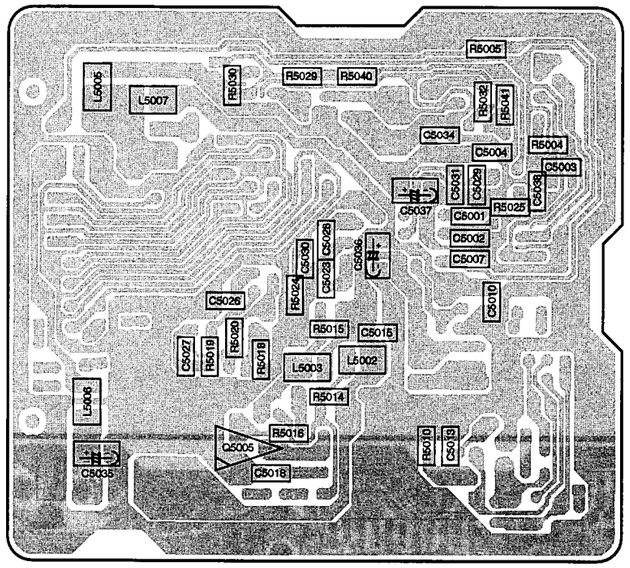


3-36. FRONT (R) C.B.A. (VEP04696B)

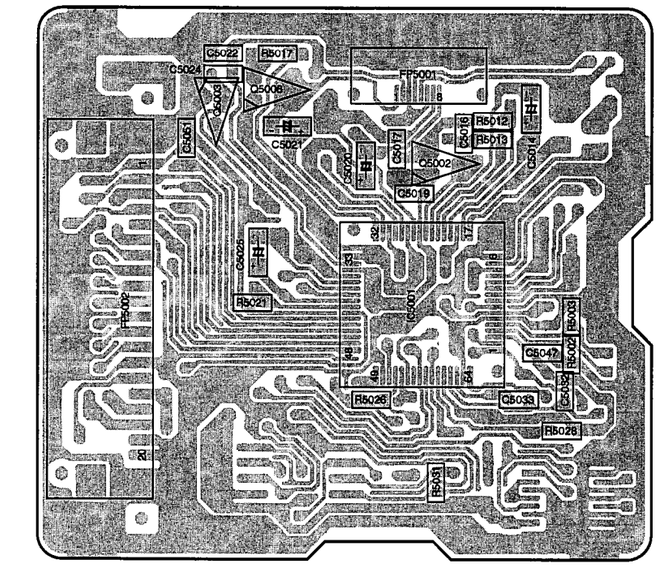


3-37. HEAD AMP C.B.A. (VEP05351A)

NOTE: MULTILAYER C.B.A.
THIS C.B.A. IS Multi-Layer C.B.A. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT-PATTERNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.



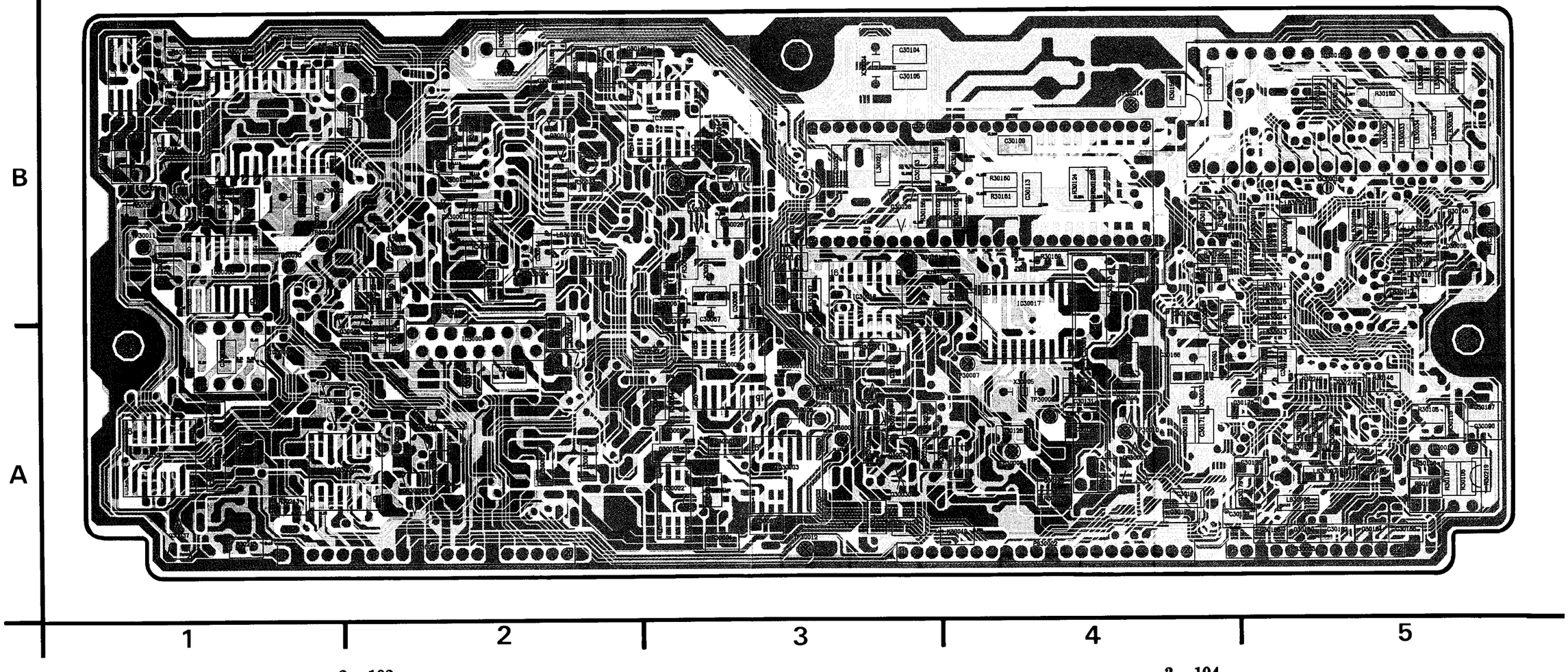
(FOIL SIDE)



(COMPONENT SIDE)

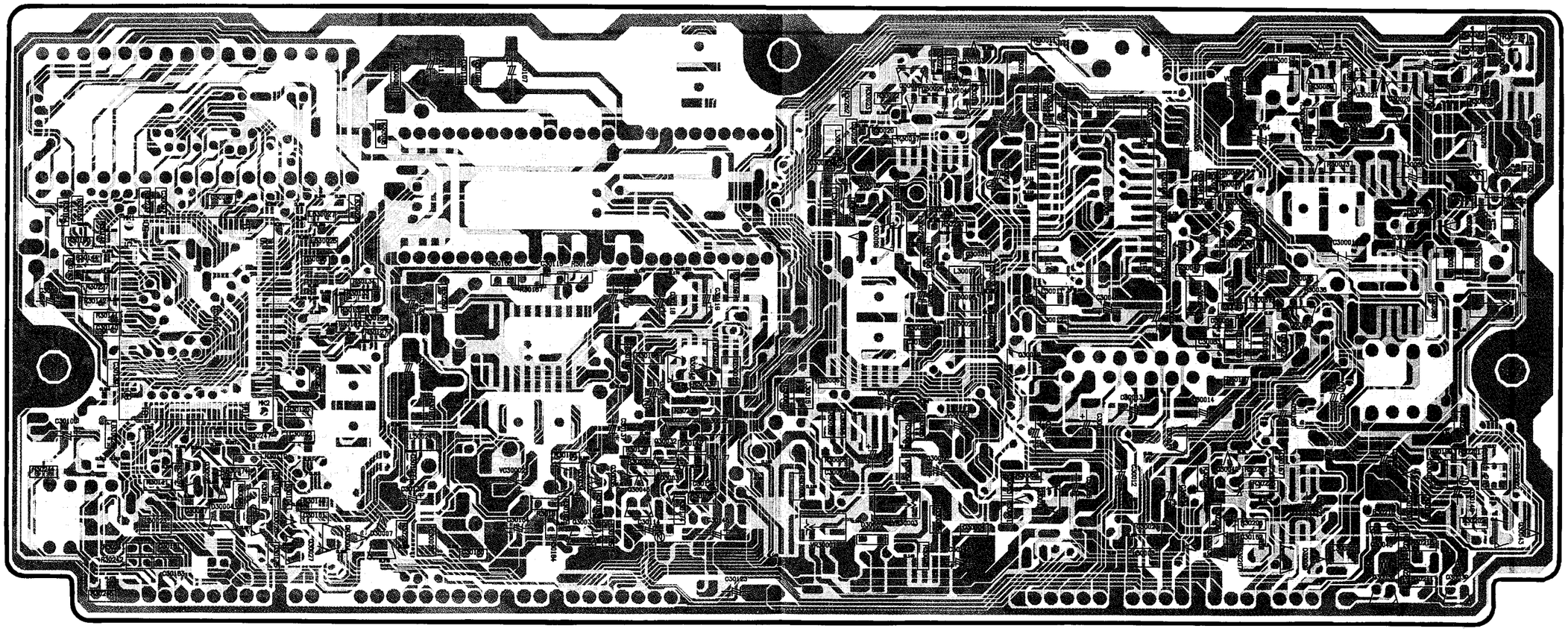
C B A

3-38. ANALOG Y/C C.B.A. (VEP03E27A)



ANALOG Y/C C.B.A.									
Transistor		Q30025	A-6	**Transistor & Resistor**		IC30018	B-3	VR30003	A-8
Q30001	A-2	Q30026	A-6	QR30001	B-2	IC30019	A-1	VR30004	B-10
Q30002	A-2	Q30027	A-7	QR30003	A-4	**Test Point**		**Connector**	
Q30003	B-9	Q30028	B-3	QR30004	A-7	TL30006	B-2	PS30001	A-2
Q30004	B-9	Q30030	A-3	QR30005	B-1	TP30001	A-3	PS30002	A-4
Q30005	B-8	Q30031	A-8	QR30006	A-2	TP30002	B-2	PS30003	A-5
Q30006	B-8	Q30032	A-8	**Integrated Circuit**		TP30003	B-1		
Q30007	B-3	Q30033	A-7	IC30001	B-3	TP30004	A-3		
Q30008	B-3	Q30034	A-7	IC30002	A-3	TP30005	B-3		
Q30009	B-8	Q30035	A-7	IC30003	A-3	TP30007	A-4		
Q30010	B-2	Q30036	A-9	IC30004	A-2	TP30008	A-4		
Q30011	B-10	Q30037	A-1	IC30005	B-1	TP30009	A-4		
Q30012	B-2	Q30038	A-10	IC30006	A-1	TP30010	A-4		
Q30013	B-9	Q30039	A-10	IC30007	A-1	TP30011	B-1		
Q30014	B-9	Q30040	A-10	IC30008	B-9	TP30012	A-3		
Q30015	A-9	Q30042	A-9	IC30009	A-3	TP30013	B-1		
Q30016	B-1	Q30043	A-10	IC30010	B-1	TP30014	B-4		
Q30017	A-9	Q30044	A-2	IC30011	B-1	**Adjustment**			
Q30018	B-1	Q30045	A-8	IC30012	A-5	VC30001	B-10		
Q30019	A-10	Q30046	A-3	IC30013	B-6	VC30002	A-7		
Q30020	B-10	Q30047	A-3	IC30014	B-5	VC30003	B-9		
Q30021	B-10	Q30048	A-8	IC30015	B-5	VR30001	A-8		
Q30022	B-10	Q30049	A-9	IC30016	B-3	VR30002	B-2		
Q30023	B-10			IC30017	B-4				
Q30024	B-10								

ADDRESS INFORMATION



3-39. DIGITAL C.B.A. (VEP03E55A)

AV DIGITAL C.B.A. (1)

Transistor

Q3001	A-4
Q3002	A-4
Q3003	A-7
Q3004	A-5
Q3005	A-5
Q3006	A-5
Q3007	A-7
Q3008	A-7
Q3201	B-2
Q6001	B-1

Transistor & Resistor

QR2001	A-10
QR2002	A-9
QR2003	A-9
QR6001	B-1

Integrated Circuit

IC2001	A-2
IC2002	A-2
IC2004	A-10
IC2005	A-8
IC2006	A-3
IC3001	B-4
IC3002	B-7
IC3003	B-4
IC3004	B-4
IC3005	B-6
IC3006	A-7
IC3007	A-4
IC3008	B-7
IC3009	A-4
IC3010	A-7
IC3201	A-3
IC3202	A-8
IC3203	B-9
IC3204	B-8
IC3205	B-3
IC3207	B-2
IC3701	B-5
IC4201	B-7
IC4210	B-3
IC4501	B-4
IC6001	B-10
IC6002	B-1
IC6003	B-1
IC6004	B-1
IC6005	B-1
IC6006	A-1

Diode

D2001	A-9
D2003	B-9
D2004	B-9
D2005	B-9
D2006	A-3
D2007	B-9
D2008	A-2
D2009	A-10
D2010	A-10
D2011	B-10
D2012	B-10
D2013	A-10
D2014	B-2
D3002	A-5
D3003	B-7
D3201	B-3
D4501	B-7
D6002	B-10
D6003	B-10
D6004	B-10
D6005	B-10
D6007	B-1
D6008	B-1

Test Point

TL1	A-1
TL4	A-9
TL5	A-9
TL9	B-9
TL10	A-1
TL11	A-1
TL12	A-1
TL13	A-2
TL14	A-2
TL15	B-2
TL16	B-2
TL17	B-2
TL18	A-2
TL19	A-2
TL20	B-9
TL21	B-2
TL22	B-2
TL23	B-2
TL26	B-9
TL27	A-2
TL28	A-2
TL29	B-1
TL30	A-2
TL31	B-1
TL32	A-2
TL33	A-1
TL34	A-1
TL35	A-1
TL36	A-1
TL37	B-1
TL47	B-1
TL59	B-8
TL60	B-8
TL3002	B-6
TL3004	A-5
TL3006	A-6
TL3014	A-5
TL3020	B-5
TL3024	B-5
TL3026	B-4
TL3027	B-4
TL3028	A-7
TL3201	B-9
TL3202	B-8
TL3203	B-9
TL3204	B-9
TL3205	B-9
TL3206	B-2
TL3207	B-3
TL3208	B-3
TL3209	B-2
TL3210	B-2
TL3211	B-2
TL3212	B-2
TL3214	B-2
TL3216	B-2
TL3217	B-2
TL3218	B-2
TL3219	B-2
TL3220	B-2
TL3221	B-2
TL3222	B-2
TL3223	B-2
TL3224	B-2
TL6001	B-10
TL6002	B-10
TL6005	B-9
TL6006	B-9
TL6007	B-9
TL6008	B-9
TL6009	B-1
TL6010	B-1
TL6012	B-10
TL6013	B-10
TL6014	B-10
TL6015	B-10
TL6016	B-10
TL6017	B-10
TL6018	B-10
TL6020	B-10
TL6021	B-10
TL6024	B-10
TL6025	B-10
TL6026	B-1
TL6029	B-10
TL6030	B-10
TL6031	B-10
TL6032	B-1
TL6033	B-10

Connector

FP3201	B-2
P3701	B-5
PS3001	A-8
PS3002	B-4

Crystal OScillator

X2001	A-2
X2002	A-3
X3001	A-5
X3003	B-4
X3004	A-4
X6001	A-1

Coil

L2001	A-9
L2002	B-9
L3001	A-4
L3002	A-4
L3003	A-7
L3004	A-5
L3005	A-4
L3006	A-5
L3007	A-7
L3008	B-5
L3009	B-5
L3010	A-5
L3201	B-7
L3202	B-9
L3204	B-7
L3205	B-7
L3208	B-8
L3210	B-9
L4201	B-4
L4501	B-7
L4502	B-7
LB2002	A-9
LB2003	A-10
LB2004	A-3
LB3001	A-5
LB3002	A-6
LB3004	A-3
LB3006	A-7
LB3701	B-5
LB3702	B-6
LB3703	B-6
LB3704	B-6
LB6004	A-9

Capacitor

C2002	A-9
C2003	A-9
C2004	B-9
C2005	A-9
C2006	A-9
C2007	B-9
C2008	B-9
C2009	B-2
C2010	B-2
C2011	A-10
C2012	A-10
C2013	A-10
C2014	B-3
C2015	B-3
C2016	A-2
C2017	A-9
C2018	A-9
C2019	A-9
C2020	A-9
C2021	B-3
C2022	A-3
C2023	A-3
C2024	B-9
C2025	A-3
C2026	B-3
C2027	B-10
C2028	B-9
C2029	A-9
C2030	A-9
C2031	B-2
C2032	A-9
C2033	B-2
C3001	A-4
C3002	A-4
C3003	A-7
C3004	A-7
C3005	B-7
C3006	A-7
C3007	B-4
C3008	B-4
C3010	B-7
C3011	B-4
C3012	B-4
C3013	B-4
C3014	B-7
C3015	B-4
C3016	B-4
C3017	B-7
C3018	A-4
C3019	A-4
C3020	B-4
C3021	A-7
C3022	A-4
C3023	A-7
C3024	A-4
C3025	A-7
C3026	B-5
C3027	A-6
C3028	A-6
C3029	B-5
C3030	B-5
C3031	A-7
C3032	A-7
C3033	B-7
C3034	A-7
C3035	B-5
C3036	B-5
C3037	B-6
C3038	B-6
C3039	B-6
C3040	B-6
C3041	B-5
C3042	A-5
C3043	A-4
C3044	A-4
C3045	A-4
C3046	A-4
C3047	A-4
C3048	A-4
C3049	A-6
C3050	A-4
C3051	A-4
C3052	A-6
C3053	A-4
C3054	A-4
C3056	A-6
C3057	A-6
C3058	A-6
C3059	B-7
C3060	A-5
C3061	A-5
C3062	B-4
C3063	A-4
C3064	A-4
C3065	A-4
C3067	A-6
C3068	A-4
C3069	A-4
C3070	A-4
C3071	A-4
C3072	A-4
C3073	B-7
C3074	B-7
C3075	B-4
C3076	B-5
C3077	B-5
C3078	B-4
C3079	B-4
C3080	B-4
C3081	A-4
C3082	B-6
C3083	B-6
C3084	B-5
C3085	B-5
C3086	A-4
C3087	A-6
C3090	B-4
C3091	A-7
C3092	A-7
C3093	A-5
C3094	A-5
C3095	A-6
C3096	A-6
C3097	B-6
C3098	B-7
C3099	B-4
C3100	B-4
C3101	B-5
C3102	A-6
C3103	A-4
C3105	B-7
C3106	B-4
C3107	B-4
C3108	A-6
C3109	A-4
C3110	A-5
C3111	A-4
C3112	B-7
C3113	B-7
C3114	B-7
C3115	B-7
C3116	A-7
C3117	A-7
C3201	A-4
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C3203	B-4
C3204	B-3
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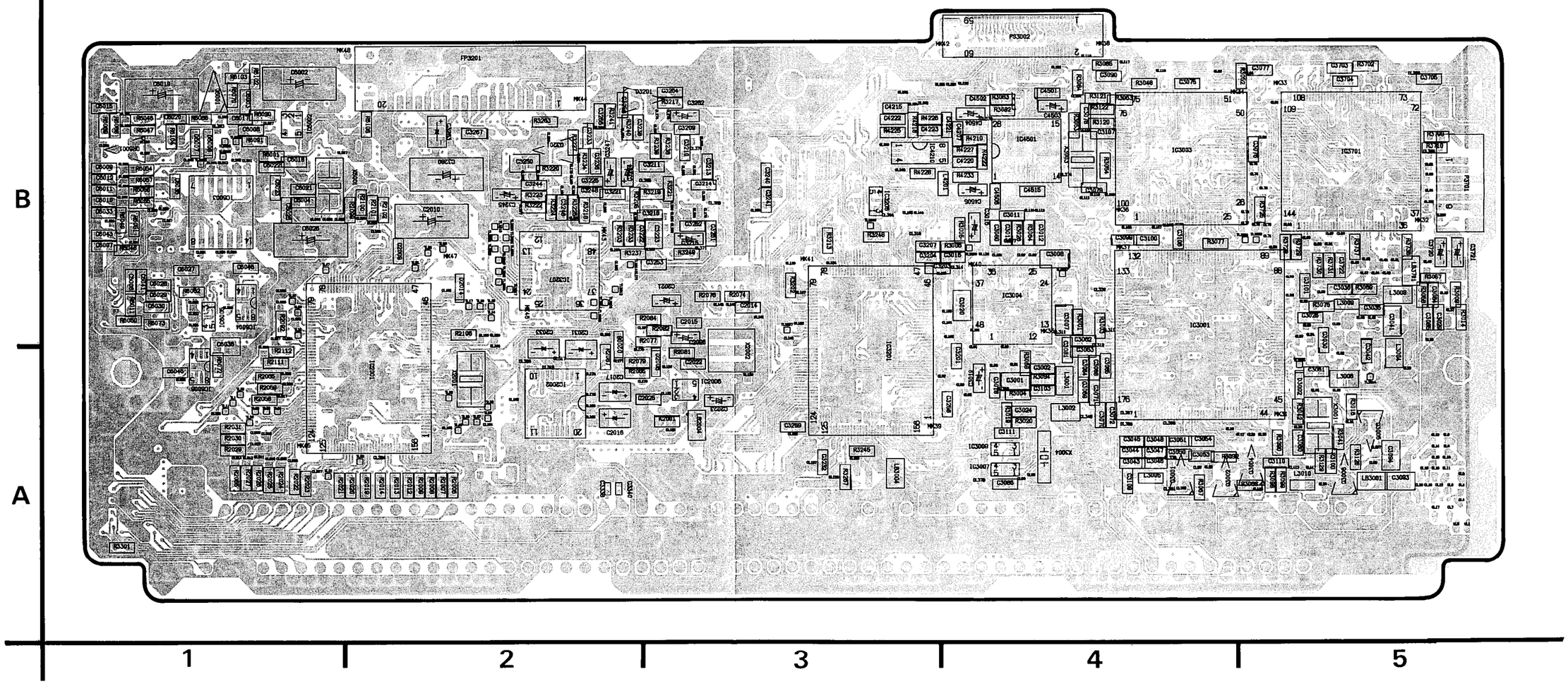
C3311	A-10
C3312	A-9
C3313	A-9
C3314	A-9
C3315	A-9
C3316	A-9
C3317	A-9
C3318	A-9
C3319	A-9
C3320	A-9
C3321	A-9
C3322	A-9
C3323	A-9

ADDRESS INFORMATION

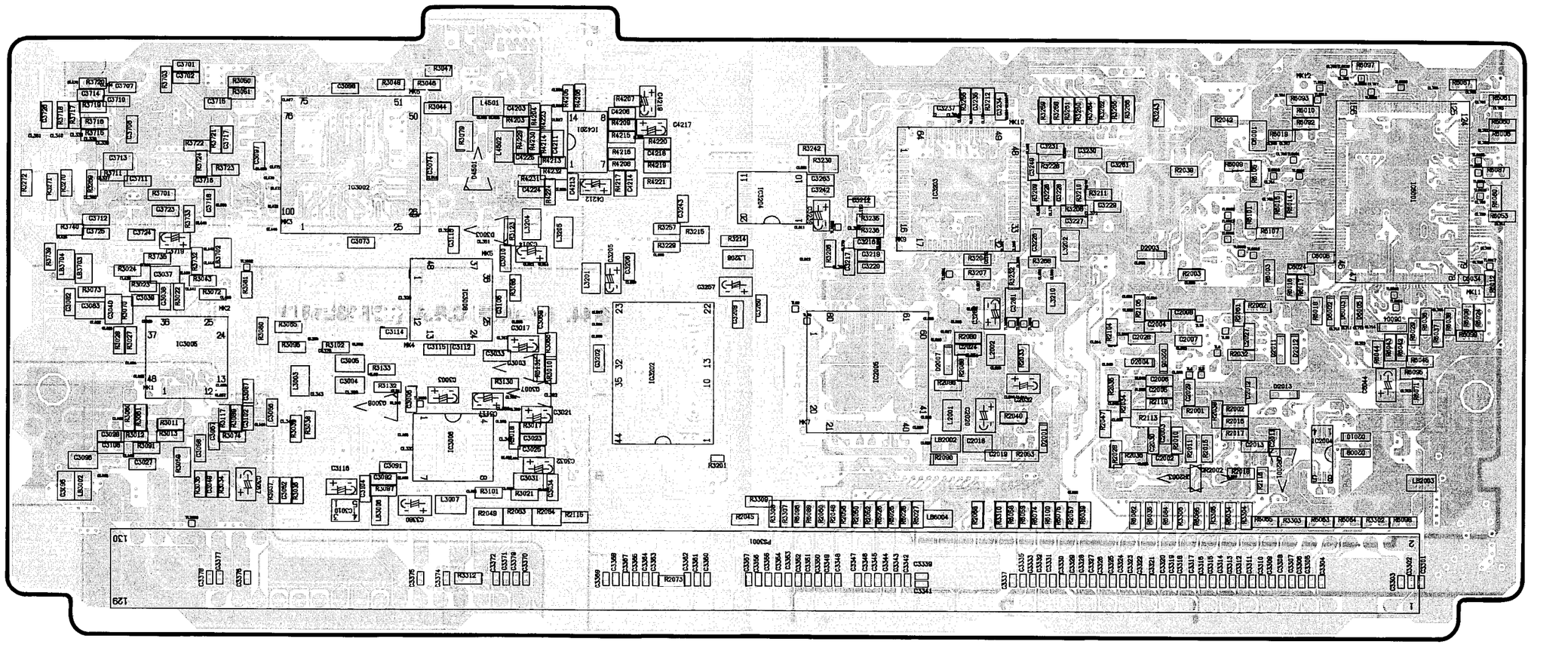
NOTE: MULTILAYER C.B.A.
THIS C.B.A. IS Multi-Layer C.B.A. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT-PATTERNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.



AV DIGITAL C.B.A. (2)

C3324	A-9	C3351	A-8	C3380	A-7	C4203	B-7	C6002	B-1	C6030	B-1	R2016	A-9	R2045	A-8	R2082	B-3	R3006	B-4	R3041	A-5	R3070	B-6	R3101	A-7	R3213	B-3	R3240	B-2	R3302	A-10	R3724	B-6	R4217	B-8
C3325	A-9	C3352	A-8	C3701	B-6	C4206	B-8	C6003	B-1	C6033	B-1	R2017	A-9	R2047	A-9	R2084	B-3	R3009	B-5	R3042	A-5	R3072	B-6	R3102	B-7	R3214	B-8	R3241	B-2	R3303	A-10	R3725	B-5	R4218	B-3
C3326	A-9	C3353	A-8	C3702	B-6	C4207	B-4	C6004	B-1	C6034	B-10	R2018	A-9	R2048	A-8	R2085	A-2	R3010	A-7	R3043	B-6	R3073	B-6	R3117	A-6	R3215	B-8	R3242	B-8	R3304	A-9	R3728	B-5	R4219	B-8
C3327	A-9	C3354	A-8	C3703	B-5	C4211	B-7	C6005	B-10	C6035	B-1	R2019	A-2	R2049	A-7	R2086	A-9	R3011	A-6	R3044	B-7	R3074	A-6	R3120	B-4	R3217	B-3	R3243	B-9	R3305	A-9	R3729	B-5	R4220	B-8
C3328	A-9	C3355	A-8	C3704	B-5	C4212	B-7	C6006	B-1	C6036	B-1	R2020	A-2	R2050	A-8	R2087	A-2	R3012	A-6	R3046	B-7	R3075	B-5	R3121	B-4	R3218	B-2	R3245	A-3	R3306	A-9	R3730	B-5	R4221	B-8
C3329	A-9	C3356	A-8	C3705	B-5	C4213	B-7	C6007	B-1	C6041	B-1	R2021	A-1	R2052	A-8	R2088	A-9	R3013	A-6	R3047	B-7	R3077	B-4	R3122	B-4	R3219	B-3	R3248	B-3	R3307	A-8	R3731	B-5	R4222	B-4
C3330	A-9	C3357	A-8	C3706	B-6	C4214	B-8	C6008	B-1	C6043	B-1	R2022	A-1	R2055	A-1	R2090	A-9	R3014	B-5	R3048	B-4	R3079	B-7	R3123	B-7	R3220	B-2	R3249	B-3	R3308	A-8	R3732	B-6	R4223	B-7
C3331	A-9	C3360	A-8	C3707	B-6	C4215	B-3	C6009	B-1	C6044	A-10	R2023	A-1	R2056	A-8	R2092	B-1	R3016	A-5	R3049	B-7	R3080	B-6	R3128	A-5	R3221	B-3	R3256	B-9	R3309	A-8	R3733	B-6	R4224	B-7
C3332	A-9	C3361	A-8	C3710	B-6	C4217	B-8	C6010	B-1	C6045	A-1	R2024	A-1	R2057	A-9	R2099	B-2	R3017	A-7	R3050	B-6	R3081	B-6	R3129	A-5	R3222	B-2	R3257	B-8	R3310	A-9	R3735	B-6	R4225	B-3
C3333	A-9	C3362	A-8	C3711	B-6	C4218	B-8	C6011	B-1	C6046	B-1	R2025	A-1	R2058	A-1	R2100	B-2	R3018	A-7	R3051	B-6	R3082	B-4	R3130	A-7	R3223	B-2	R3258	B-9	R3312	A-7	R3736	B-5	R4226	B-3
C3335	A-9	C3363	A-8	C3712	B-6	C4219	B-8	C6012	B-1			R2026	A-1	R2059	A-1	R2101	B-2	R3019	A-4	R3052	B-5	R3083	B-4	R3131	A-7	R3224	B-2	R3259	B-9	R3701	B-6	R3737	B-5	R4227	B-4
C3337	A-9	C3364	A-8	C3713	B-6	C4220	B-4	C6015	B-1	**Resistor**		R2027	A-1	R2060	A-8	R2102	B-2	R3020	A-4	R3053	B-4	R3084	B-4	R3132	A-7	R3225	B-2	R3260	B-9	R3702	B-5	R3739	B-6	R4228	B-3
C3338	A-2	C3365	A-8	C3714	B-6	C4221	B-4	C6017	B-1	R2001	A-9	R2028	A-9	R2061	B-9	R2104	B-9	R3021	A-7	R3054	B-4	R3085	B-4	R3133	A-7	R3226	B-9	R3261	B-9	R3703	B-6	R3740	B-6	R4229	B-7
C3339	A-8	C3367	A-8	C3715	B-6	C4222	B-3	C6018	B-1	R2002	A-9	R2029	A-1	R2062	B-10	R2105	B-9	R3022	B-6	R3057	B-5	R3086	B-7	R3201	B-8	R3227	B-2	R3262	B-9	R3709	B-5	R4203	B-7	R4230	B-7
C3340	A-2	C3368	A-8	C3716	B-6	C4223	B-3	C6019	B-1	R2003	B-9	R2030	A-1	R2063	A-7	R2106	B-2	R3023	B-6	R3058	B-5	R3088	A-4	R3202	B-3	R3228	B-9	R3263	B-2	R3710	B-5	R4204	B-7	R4231	B-7
C3341	A-8	C3369	A-7	C3717	B-6	C4224	B-7	C6020	B-1	R2006	A-2	R2031	A-1	R2064	A-7	R2111	A-1	R3024	B-6	R3059	A-6	R3089	A-6	R3203	B-2	R3229	B-8	R3264	B-9	R3711	B-6	R4205	B-7	R4232	B-7
C3342	A-8	C3370	A-7	C3718	B-6	C4225	B-7	C6021	B-1	R2007	A-2	R2032	B-9	R2065	A-1	R2112	A-1	R3026	B-4	R3060	A-6	R3090	A-5	R3204	B-9	R3230	B-8	R3265	B-9	R3715	B-6	R4206	B-7	R4233	B-4
C3343	A-8	C3371	A-7	C3719	B-6	C4501	B-4	C6022	B-1	R2008	A-2	R2033	B-9	R2068	A-9	R2113	A-9	R3027	B-6	R3061	A-6	R3091	A-6	R3205	B-2	R3232	B-9	R3266	B-9	R3716	B-6	R4207	B-8	R6001	B-1
C3344	A-8	C3372	A-7	C3720	B-5	C4502	B-4	C6023	B-1	R2009	A-2	R2034	A-9	R2073	A-8	R2115	A-7	R3028	B-6	R3063	B-4	R3092	A-4	R3206	B-8	R3233	B-2	R3267	A-3	R3717	B-6	R4208	B-8	R6003	B-10
C3345	A-8	C3374	A-7	C3721	B-5	C4503	B-4	C6024	B-10	R2010	A-9	R2035	A-9	R2074	B-3	R2118	A-10	R3034	A-6	R3064	B-4	R3094	A-4	R3207	B-9	R3234	B-2	R3268	B-9	R3718	B-6	R4209	B-8	R6006	B-10
C3346	A-8	C3375	A-7	C3722	B-5	C4504	B-4	C6025	B-1	R2011	A-9	R2036	A-9	R2076	B-3	R2119	A-9	R3035	A-6	R3065	B-6	R3095	B-6	R3208	B-9	R3235	B-8	R3269	B-6	R3719	B-6	R4210	B-4	R6008	B-10
C3347	A-8	C3376	A-6	C3723	B-6	C4505	B-4	C6026	B-1	R2012	A-2	R2038	A-9	R2077	B-3	R3001	B-4	R3036	A-7	R3066	B-7	R3097	A-7	R3209	B-9	R3236	B-8	R3270	B-6	R3720	B-6	R4213	B-7	R6009	B-9
C3348	A-8	C3377	A-6	C3724	B-6	C4506	B-4	C6027	B-1	R2013	A-2	R2039	B-9	R2079	A-2	R3003	B-4	R3037	A-6	R3067	A-4	R3098	A-5	R3210	B-9	R3237	B-2	R3271	B-6	R3721	B-6	R4214	B-7	R6010	B-10
C3349	A-8	C3378	A-7	C3725	B-6	C4515	B-4	C6028	B-1	R2014	A-2	R2040	A-9	R2080	B-9	R3004	A-4	R3038	A-7	R3068	A-5	R3099	A-5	R3211	B-9	R3238	B-3	R3272	B-6	R3722	B-6	R4215	B-8	R6011	B-1
C3350	A-8	C3379	A-7	C3726	B-6	C6001	B-10	C6029	B-1	R2015	A-9	R2042	B-9	R2081	A-3	R3005	B-4	R3039	A-7	R3069	A-5	R3100	A-5	R3212	B-9	R3239	B-3	R3301	A-1	R3723	B-6	R4216	B-8	R6012	B-10

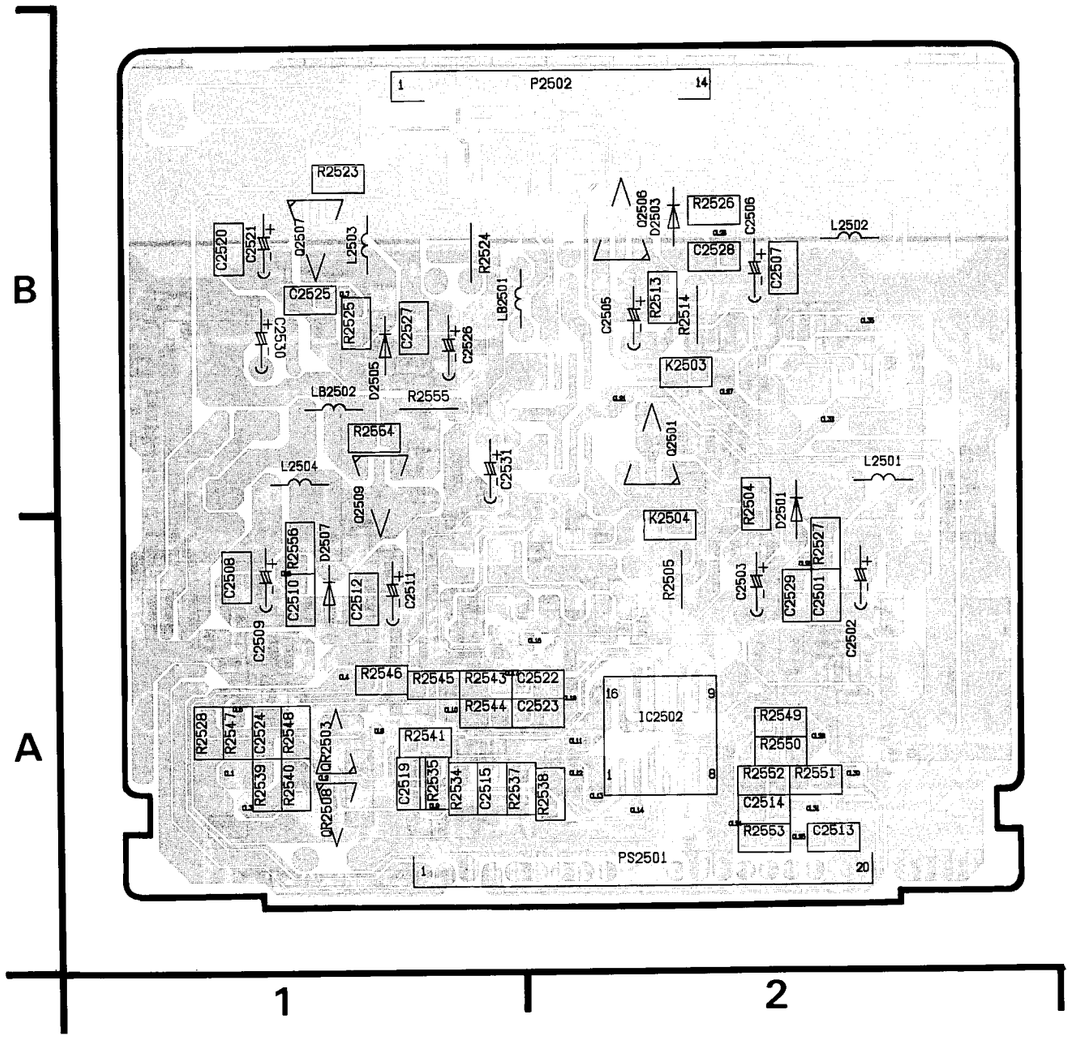
ADDRESS INFORMATION



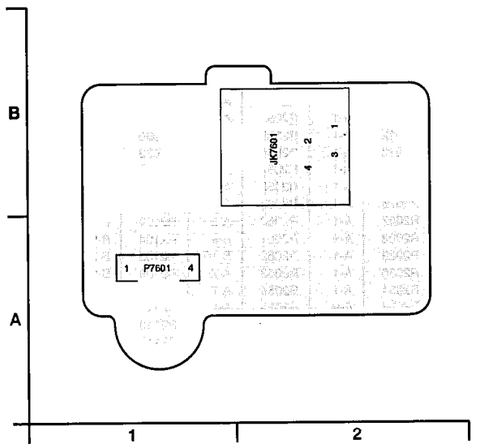
AV DIGITAL C.B.A. (3)																	
R6014	B-10	R6027	A-8	R6042	B-10	R6051	B-1	R6060	B-10	R6070	B-1	R6085	A-9	R6097	B-10	R6107	B-10
R6015	B-10	R6028	A-8	R6043	B-10	R6052	B-1	R6061	B-10	R6071	A-10	R6087	B-10	R6098	A-10	R6108	B-2
R6016	B-10	R6029	B-10	R6044	B-10	R6053	B-10	R6063	A-10	R6072	A-1	R6089	A-8	R6099	B-10		
R6017	B-10	R6034	A-9	R6045	B-10	R6054	B-1	R6064	A-10	R6073	B-1	R6090	B-1	R6100	A-9		
R6018	B-10	R6035	A-9	R6046	B-1	R6055	B-1	R6065	A-10	R6074	A-9	R6091	B-1	R6101	B-10		
R6019	B-10	R6036	B-10	R6047	B-1	R6056	B-1	R6066	B-1	R6075	A-9	R6092	B-10	R6102	B-1		
R6024	B-10	R6037	B-10	R6048	B-1	R6057	B-1	R6067	B-10	R6080	B-10	R6093	B-10	R6103	B-1		
R6025	A-8	R6038	B-10	R6049	B-1	R6058	A-9	R6068	B-1	R6082	A-9	R6095	A-10	R6104	B-1		
R6026	A-8	R6039	A-9	R6050	B-1	R6059	A-9	R6069	B-1	R6084	A-9	R6096	A-8	R6105	B-10		

ADDRESS INFORMATION

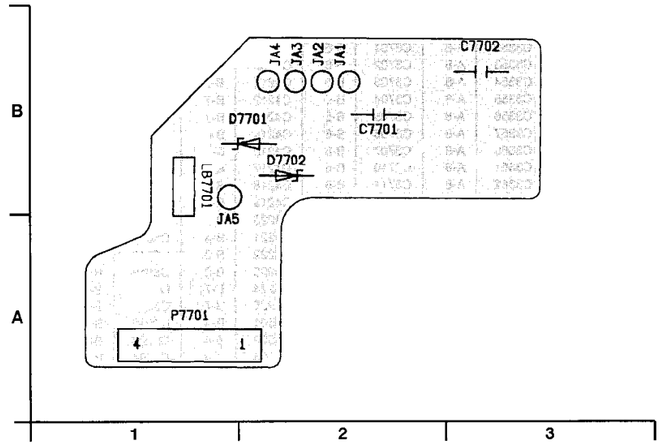
3-40. MOTOR DRIVE C.B.A. (VEP06C89A)



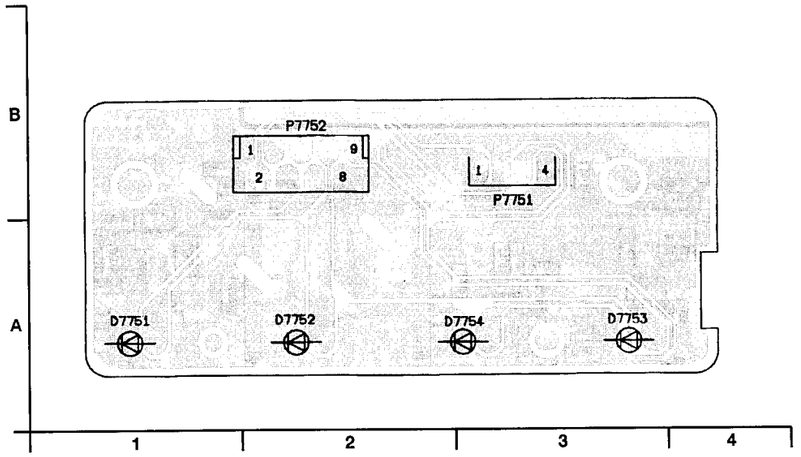
3-41. MODULAR C.B.A. (VEP07966A)



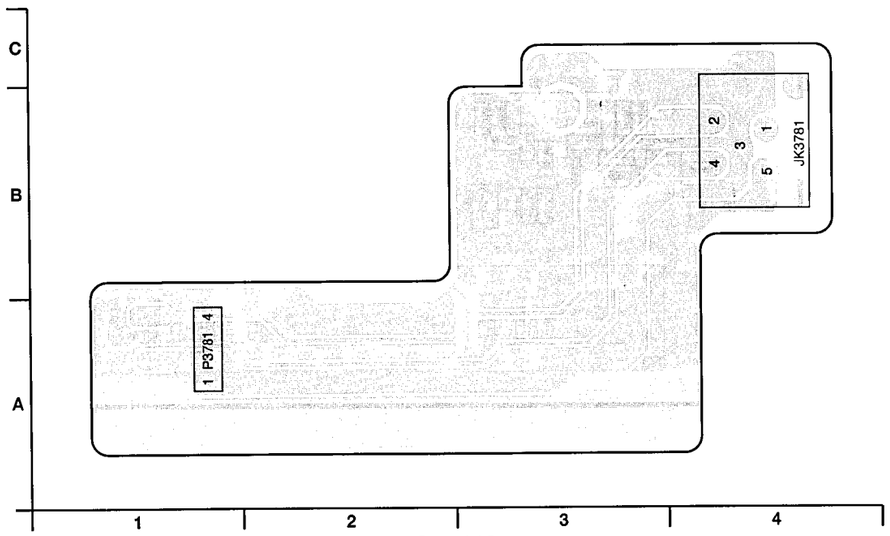
3-42. IR C.B.A. (VEP07968B)



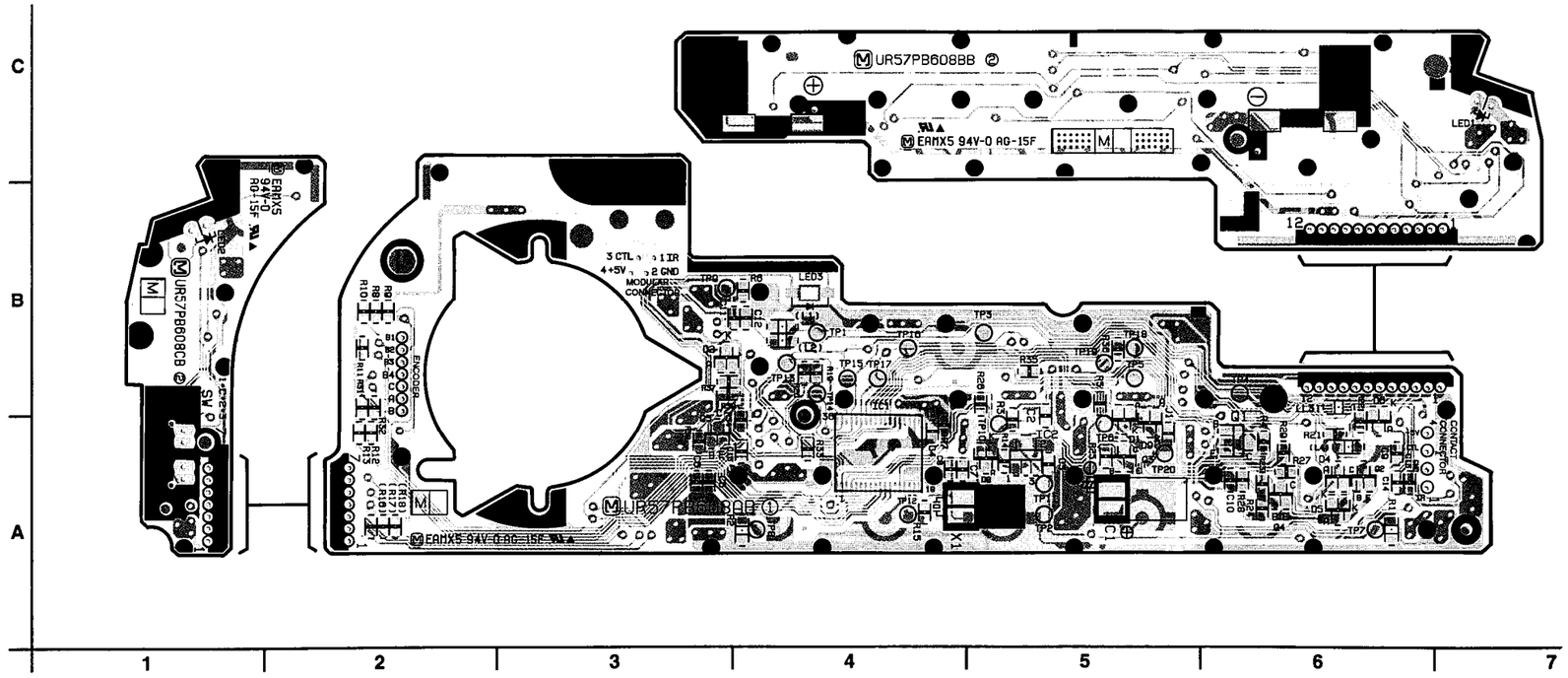
3-43. FRONT LED C.B.A. (VEP07965A)



3-44. 5P JACK C.B.A. (VEP03E18A)



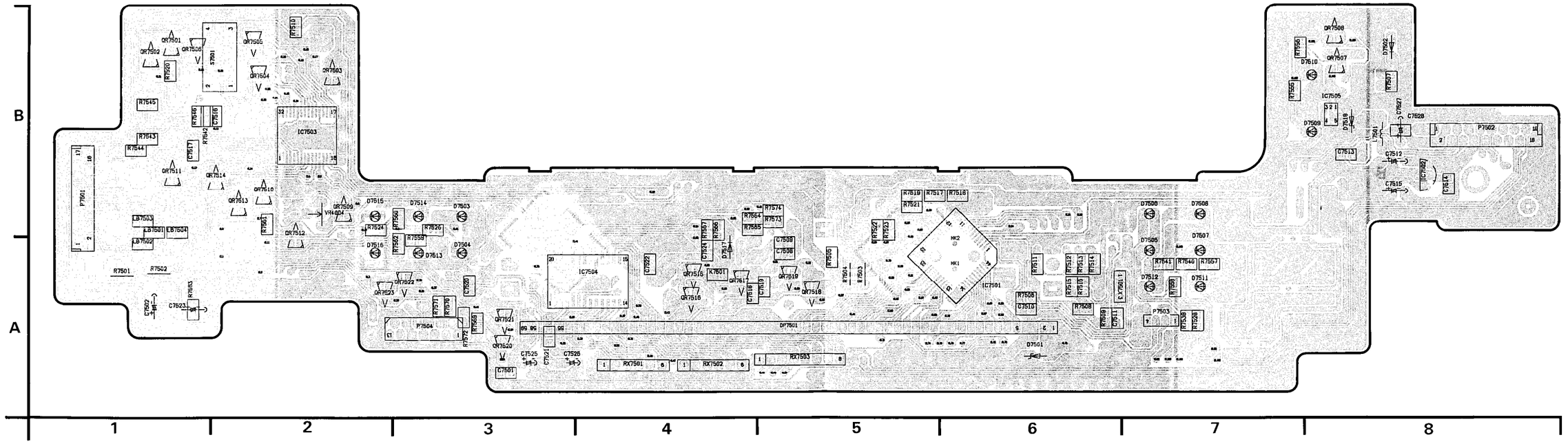
3-45. EDITING CONTROLLER C.B.A. (UR57VPB623)



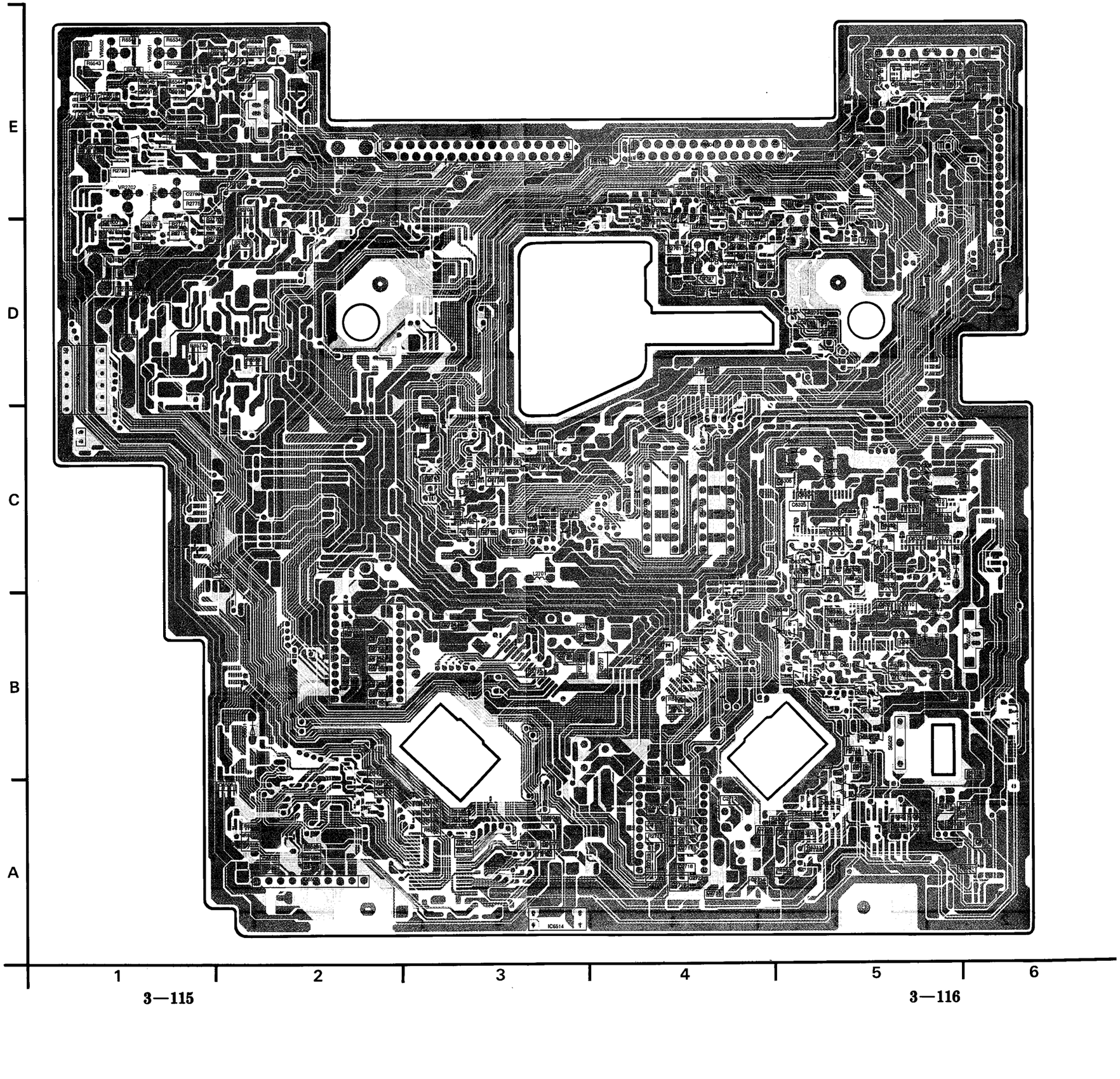
TIMER C.B.A.			
Transistor & Resistor		**Integrated Circuit**	
QR7501	B-1	IC7501	A-6
QR7502	B-1	IC7502	B-8
QR7503	B-2	IC7503	B-2
QR7504	B-2	IC7504	A-4
QR7505	B-2	IC7505	B-8
QR7506	B-1	**Adjustment**	
QR7507	B-8	VR4004	B-2
QR7508	B-8	**Connector**	
QR7509	B-2	P7501	B-1
QR7510	B-2	P7502	B-8
QR7511	B-1	P7503	A-7
QR7512	B-2	P7504	A-3
QR7513	B-2		
QR7514	B-2		
QR7515	A-4		
QR7516	A-4		
QR7517	A-4		
QR7518	A-5		
QR7519	A-5		
QR7520	A-3		
QR7521	A-3		
QR7522	A-3		
QR7523	A-2		

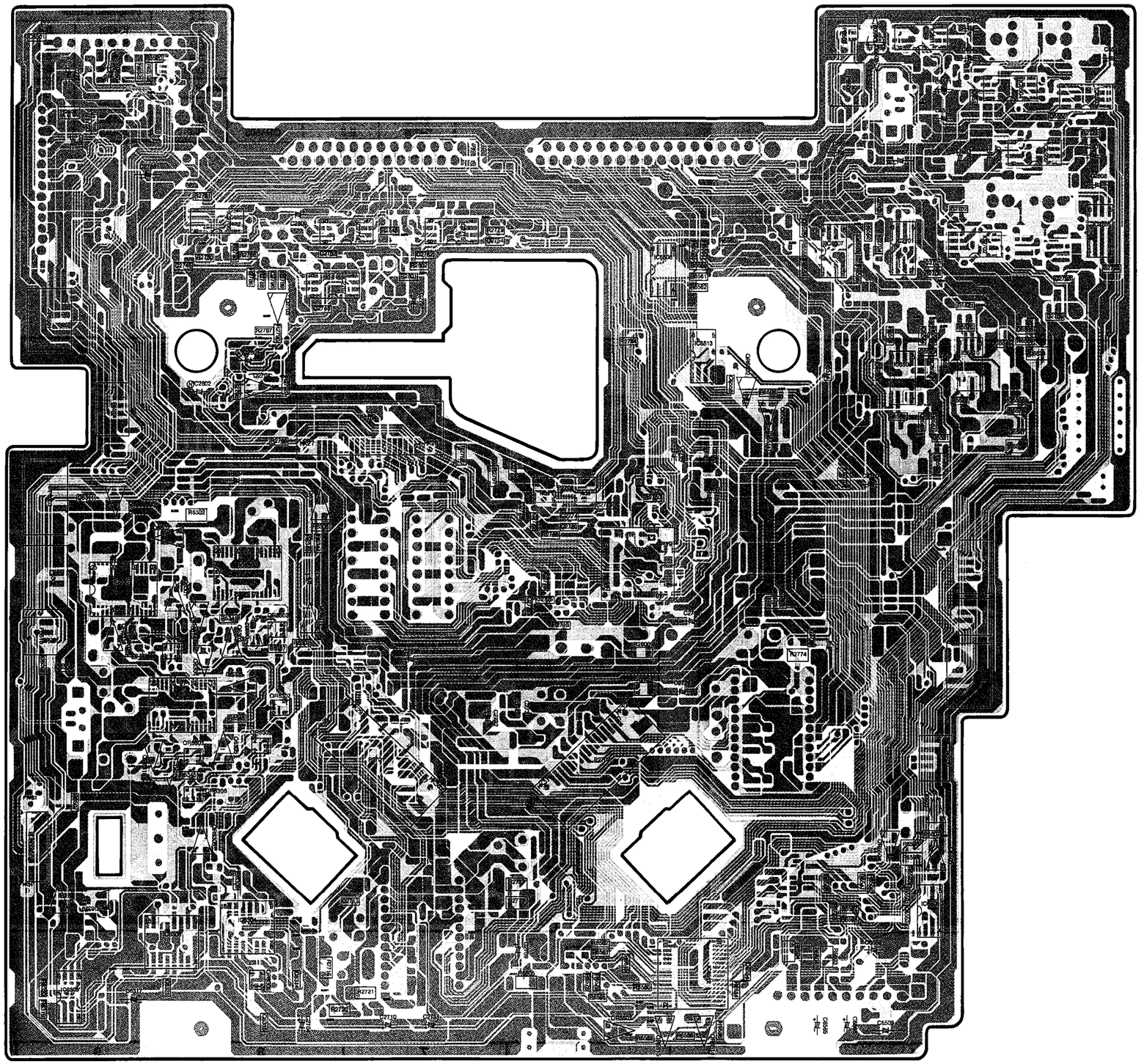
ADDRESS INFORMATION

3-46. TIMER C.B.A. (VEP07977A)



3-47. MECHANISM DRIVE C.B.A. (VEP02557B)





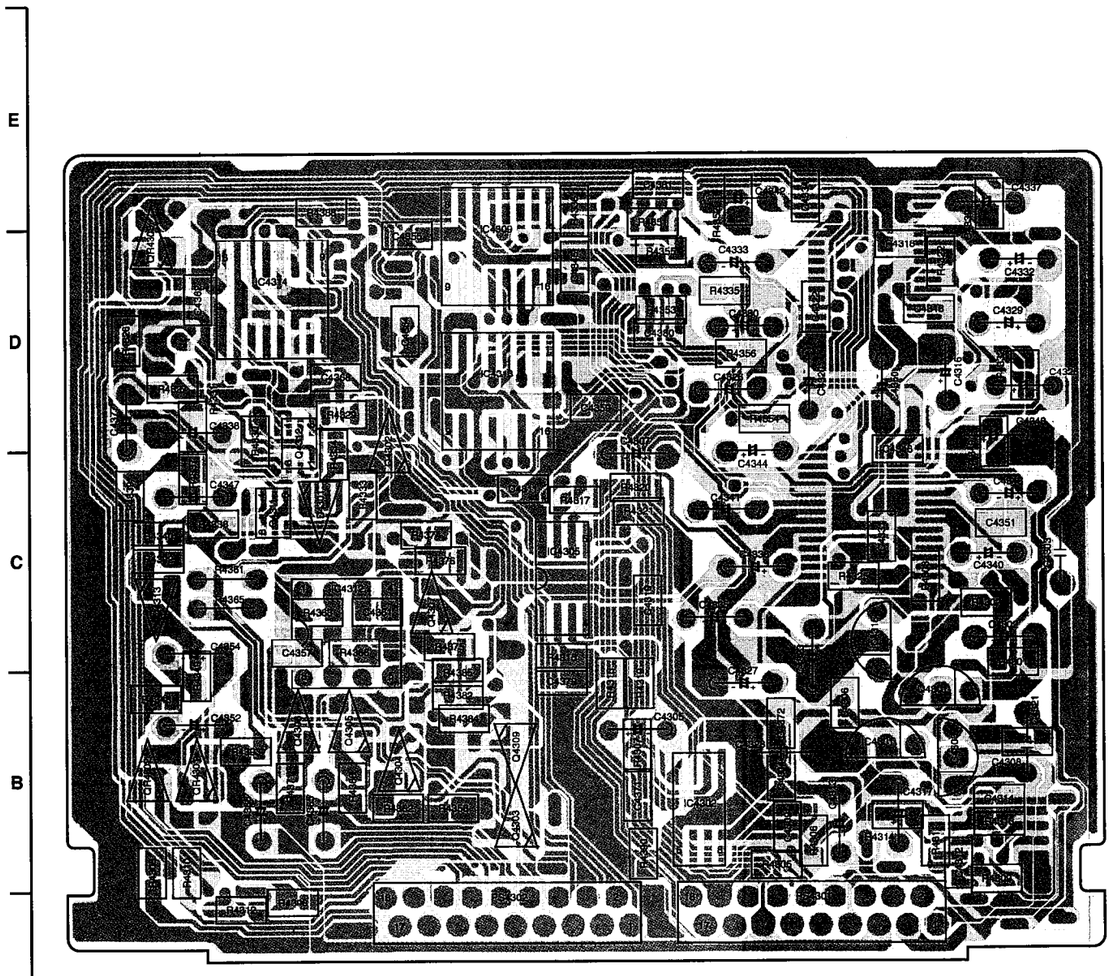
MECHANISM DRIVE C.B.A.			
Transistor		IC2715	D-9
Q2701	E-5	IC6301	C-7
Q2703	D-8	IC6302	C-8
Q2704	D-8	IC6303	B-8
Q6301	C-8	IC6304	A-8
Q6302	C-8	IC6305	A-7
Q6303	C-8	IC6306	A-8
Q6304	B-8	IC6501	E-5
Q6305	B-8	IC6502	A-2
Q6306	B-8	IC6503	E-12
Q6307	C-7	IC6504	E-12
Q6308	C-8	IC6505	E-12
Q6502	D-10	IC6506	A-11
Q6503	B-11	IC6507	D-11
Q6504	E-1	IC6508	D-10
Q6505	B-11	IC6509	D-11
Transistor & Resistor		IC6510	D-11
QR2701	E-8	IC6511	E-10
QR6301	C-8	IC6512	A-10
QR6302	C-8	IC6513	D-10
QR6303	B-8	IC6514	A-3
QR6304	A-7	**Test Point**	
QR6305	B-8	TL2701	D-1
QR6306	A-8	TL2702	D-1
QR6307	B-8	TP2701	D-1
QR6308	B-8	TP2702	D-1
QR6309	B-8	TP2703	D-1
QR6314	C-7	TP2704	D-1
QR6315	C-8	TP6501	D-1
QR6316	B-7	TP6502	E-2
QR6317	C-8	TP6503	E-2
QR6318	C-4	TP6404	E-3
QR6501	E-8	TP6505	E-5
QR6502	D-10	**Adjustment**	
QR6503	A-10	VR2701	E-1
QR6504	B-11	VR2702	E-1
QR6505	B-10	VR6501	E-1
QR6506	A-10	VR6502	E-1
QR6507	A-10	**Connector**	
QR6508	E-5	P2701	B-8
QR6511	B-2	P2702	B-10
QR6514	A-10	P2703	C-9
QR6515	A-10	P2704	D-8
QR6516	E-8	P2705	E-6
QR6517	E-5	P6301	B-11
Integrated Circuit		P6302	C-7
IC2701	D-11	P6303	C-7
IC2702	D-11	P6501	D-7
IC2703	A-4	P6502	C-1
IC2704	B-2	P6503	E-11
IC2705	E-12	P6504	E-4
IC2706	E-8	P6505	E-3
IC2707	D-8	P6506	E-11
IC2708	C-10	P6507	C-11
IC2709	C-4	P6508	C-11
IC2710	C-4	P6509	B-7
IC2711	C-4	P6510	C-7
IC2712	C-4	P6514	D-7
IC2713	D-12	P6520	B-11
IC2714	D-8		

ADDRESS INFORMATION

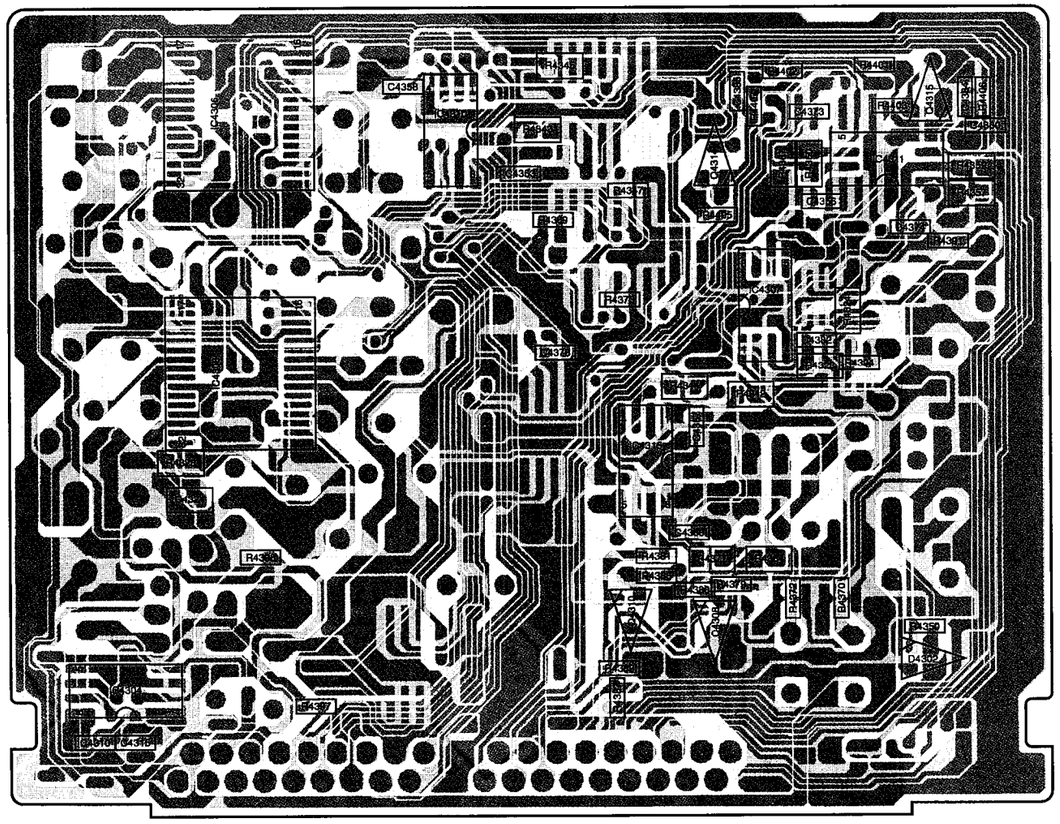
3-48. AUDIO C.B.A. (VEP04669B)

AUDIO C.B.A.							
Transistor		Q4310	B-8	**Integrated Circuit**		IC4310	D-8
Q4301	B-5	Q4311	C-2	IC4301	B-4	IC4311	D-9
Q4302	C-2	Q4312	D-2	IC4302	B-3	IC4312	C-2
Q4303	B-3	Q4313	C-1	IC4303	B-5	IC4313	D-3
Q4304	B-2	Q4314	D-9	IC4304	B-6	IC4314	D-2
Q4305	B-2	Q4315	D-10	IC4305	C-3	IC4315	C-8
Q4306	B-2	**Transistor & Resistor**		IC4306	D-6	IC4316	C-4
Q4307	C-2	QR4301	B-1	IC4307	D-9	**Connector**	
Q4308	B-9	QR4302	B-1	IC4308	C-6	PS4301	A-4
Q4309	B-3	QR4303	D-1	IC4309	E-3	PS4302	A-3

ADDRESS INFORMATION



(COMPONENT SIDE)

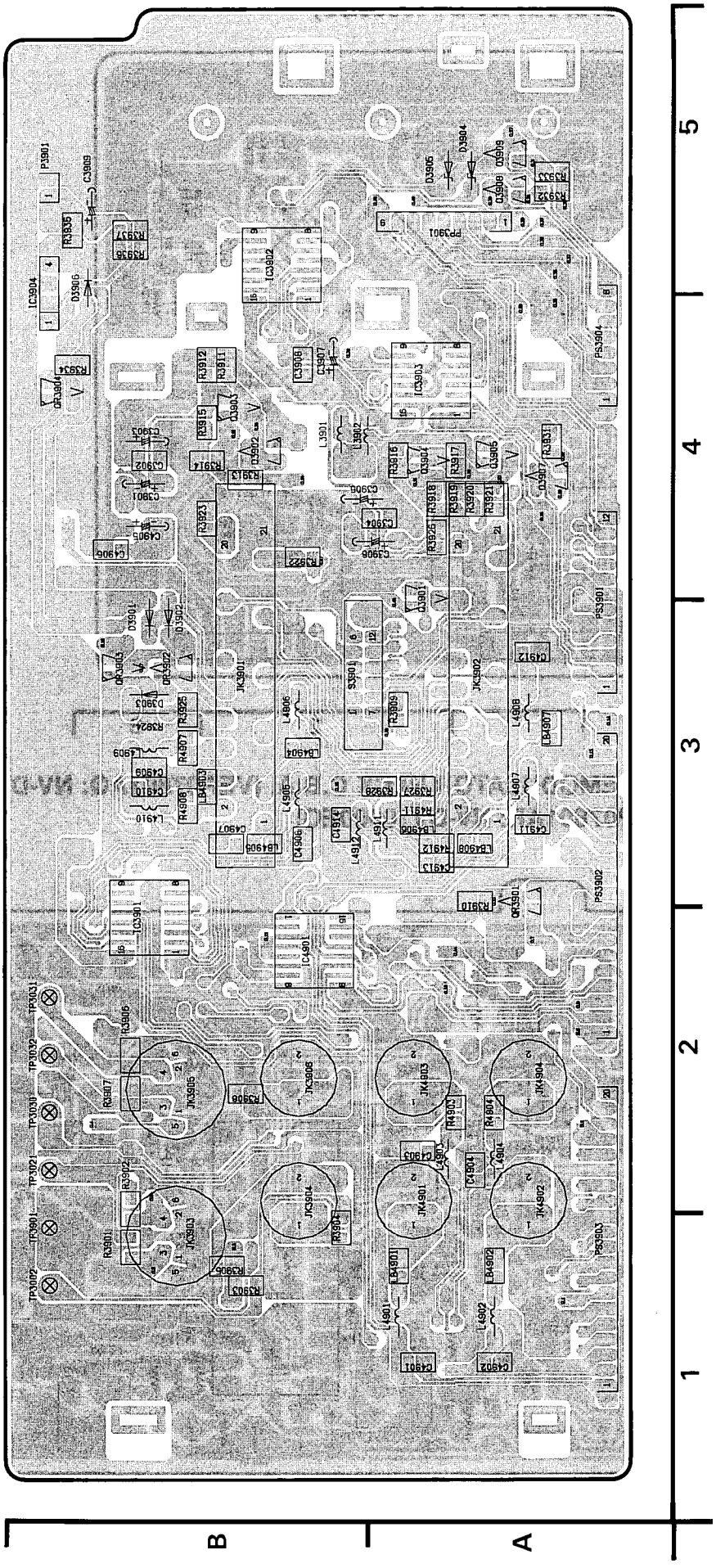


(FOIL SIDE)

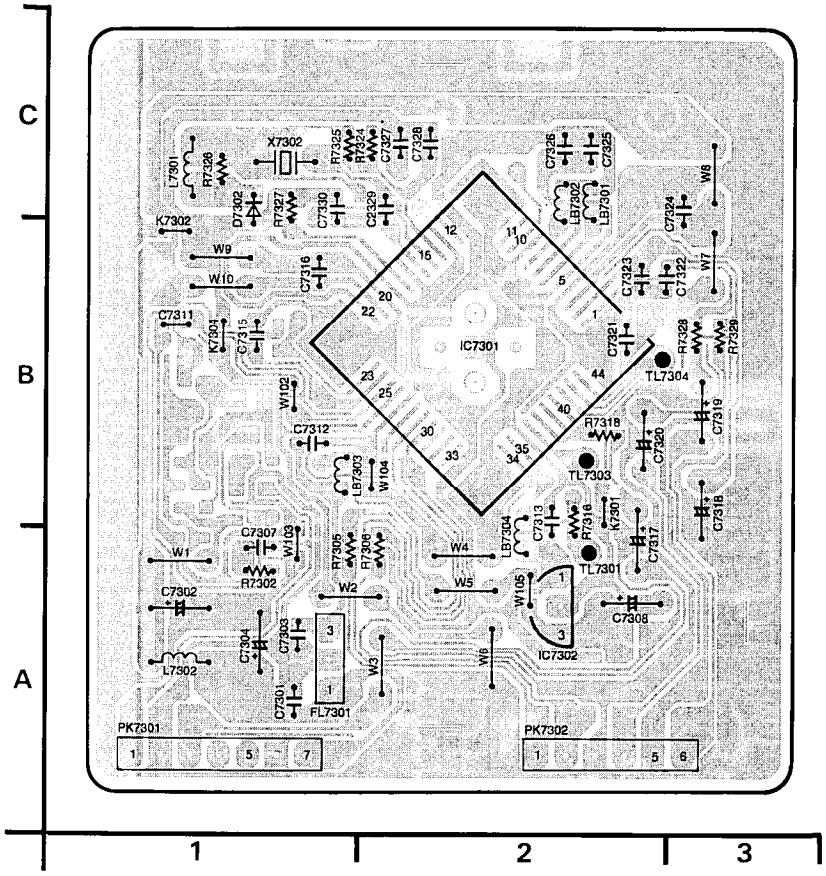
3-49. INPUT/OUTPUT C.B.A. (VEP03E28A)

INPUT/OUTPUT C.B.A.									
Transistor		Transistor & Resistor		IC3904	B-4	Connector			
				IC4901	B-2				
Q3901	A-3	QR3901	A-3	Test Point				P3901	B-5
Q3902	B-4	QR3902	B-3					PP3901	A-5
Q3903	B-4	QR3903	B-3					PS3901	A-3
Q3904	A-4	QR3904	B-4	TP3002	B-1			PS3902	A-3
Q3905	A-4	Integrated Circuit		TP3021	B-2			PS3903	A-1
Q3907	A-4			TP3030	B-2			PS3904	A-4
Q3908	A-5	IC3901	B-2	TP3031	B-2				
Q3909	A-5	IC3902	B -5	TP3032	B-2				
		IC3903	A-4	TP3901	B-1				

ADDRESS INFORMATION



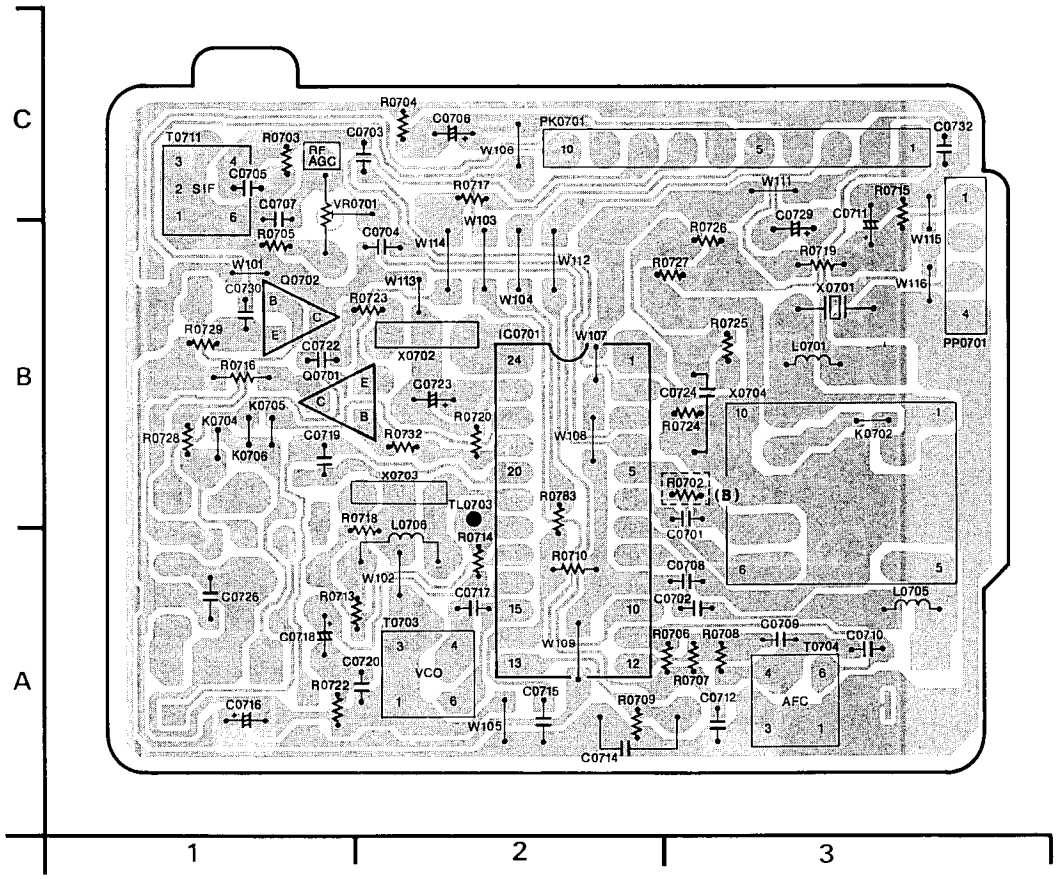
3-50. NICAM DECODER PACK C.B.A. (VEP07973A: NV-DV10000B) (VEP07973B: NV-DV10000EC)



NICAM DECODER PACK C.B.A.	
Integrated Circuit	
IC7301	B-2
IC7302	A-2
Test Point	
TL7301	A-2
TL7303	B-2
TL7304	B-2
Connector	
PK7301	A-1
PK7302	A-2

ADDRESS INFORMATION

3-51. TV DEMODULATOR PACK C.B.A. (VEP07801AQ: NV-DV10000B) (VEP07801AR: NV-DV10000EC)



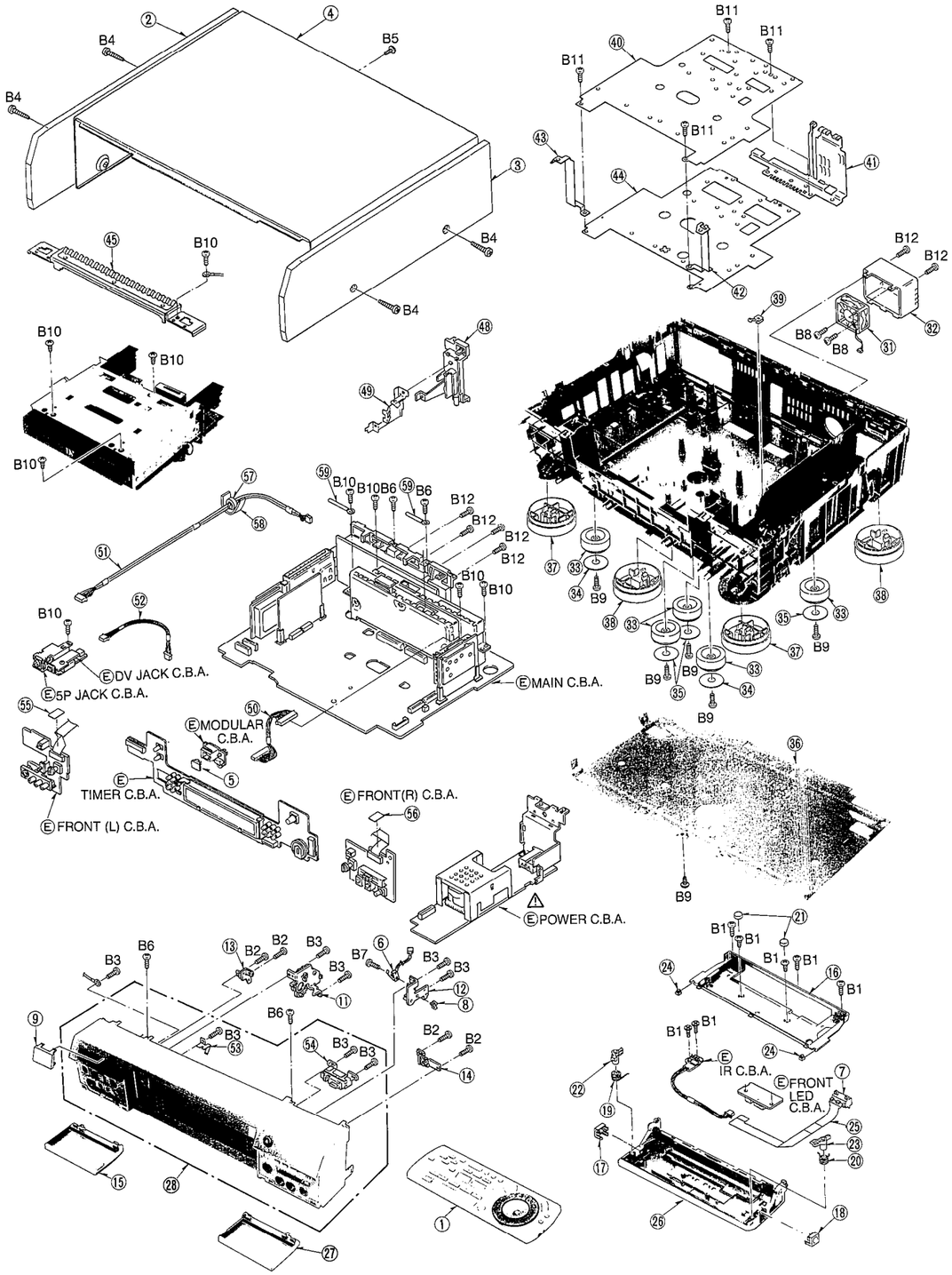
TV DEMODULATOR PACK C.B.A.	
Transistor	
Q0701	B-1
Q0702	B-1
Integrated Circuit	
IC0701	B-2
Test Point	
TL0703	B-2
Adjustment	
T0703	A-2
T0704	A-3
T0711	C-1
VR0701	C-1
Connector	
PK0701	C-2
PP0701	C-3

ADDRESS INFORMATION

SECTION 4
EXPLODED VIEWS & PARTS LIST

4-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST

❶ CASING PARTS SECTION

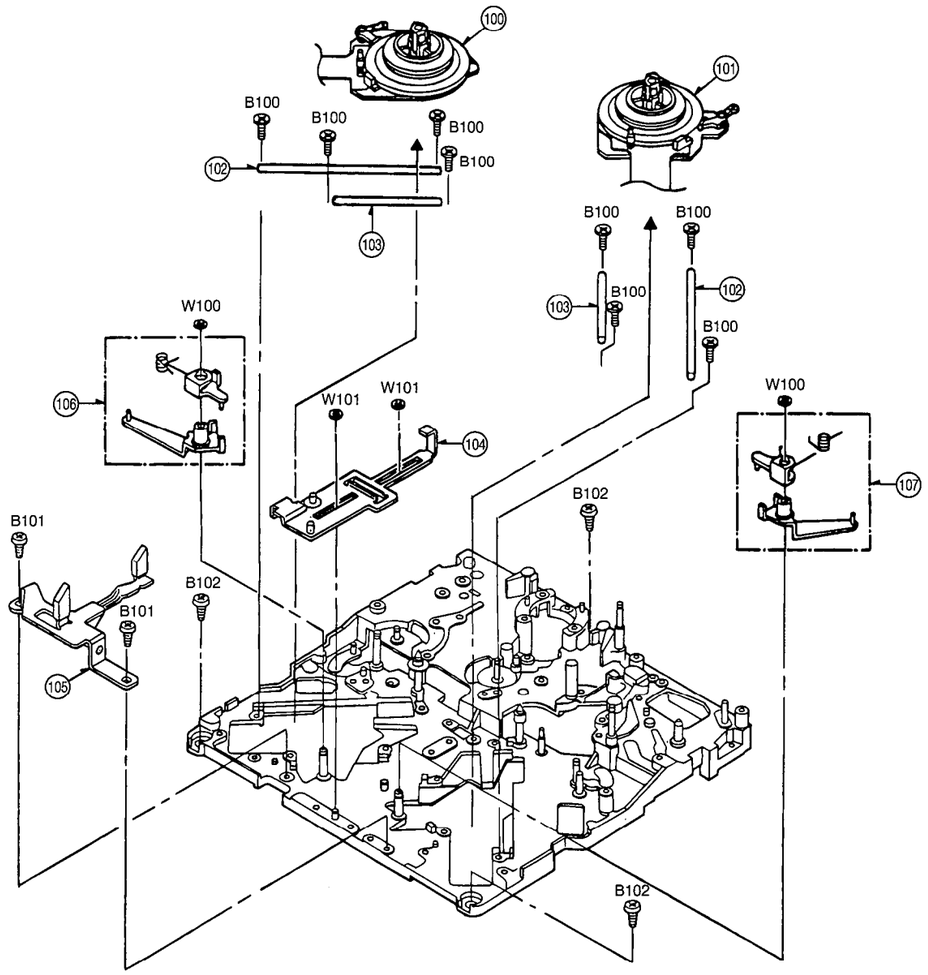


Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	EUR571503	EDITING CONTROLLER	1	
2	VGK2447	SIDE PANEL (L)	1	
3	VGK2448	SIDE PANEL (R)	1	
4	VGM1493	TOP PANEL	1	
5	VGQ4455	MODULAR CAP	1	
6	VSP1082	FRONT SW ASS'Y	1	
7	VGQ2807	FLEXIBLE CABLE HOLDER	1	
8	VJF0496	CLAMPER	1	
9	VKW2399	IR WINDOW	1	
11	VXA6018	DOOR ANGLE (L) ASS'Y	1	
12	VXA6019	DOOR ANGLE (R)	1	
13	VXA6045	DAMPER ANGLE (L) ASS'Y	1	
14	VXA6046	DAMPER ANGLE (R) ASS'Y	1	
15	VYF2579	DOOR (L) ASS'Y	1	
16	VGP4571	DOOR PANEL	1	
17	VGU7567	LOCK BUTTON (L)	1	
18	VGU7568	LOCK BUTTON (R)	1	
19	VMB3186	LOCK LEVER SPRING (L)	1	
20	VMB3187	LOCK LEVER SPRING (R)	1	
21	VMG0837	RUBBER BUSH (A)	2	
22	VML3269	LOCK LEVER (L)	1	
23	VML3270	LOCK LEVER (R)	1	
24	VMT0212	CUSHIN RUBBER	2	
25	VWJ1199	FLAT CARD CABLE (9P)	1	P7752-P7504
26	VYF2577	DOOR (C) 1 ASS'Y	1	
27	VYF2569	DOOR (R) ASS'Y	1	AG-DV2700E
27	VYF2570	DOOR (R) ASS'Y	1	AG-DV2700B
28	VYP7098	FRONT PANEL (1) ASS'Y	1	
31	VRF0087	PAPER FAN MOTOR ASS'Y	1	
32	VKF3003	REAR COVER	1	
33	VKA0301	CERAMIC LEG	5	
34	VMG1031	LEG SHEET A	2	
35	VMG1049	LEG SHEET B	3	
36	VKU0528	BOTTOM PLATE	1	
37	VKA0310	LEG (F)	2	
38	VKA0311	LEG (R)	2	
39	VMC1065	EARTH SPRING	1	
40	VMZ2721	SHIELD SHEET	1	
41	VSC4795	SHIELD PLATE	1	
42	VSC4756	SHIELD PLATE (B3)	1	
43	VSC4757	SHIELD PLATE (B4)	1	
44	VSC4691	SHIELD PLATE	1	
45	VXA6179	TOP ANGLE ASS'Y	1	
48	VJH0979	ANTENNA JACK PLATE	1	
49	VMC1213	ANTENNA EARTH SPRING	1	
50	VEE0C24	WIRE CABLE (14P)	1	P2705-P2502
51	VEE0C26	WIRE CABLE (6P)	1	P3701-P7651
52	VEE0C25	WIRE CABLE (4P)	1	P3781-P6601
53	VMC1374	REDUCTION SPRING	1	
54	VXU1478	DOOR BUTTON ASS'Y	1	
55	VMZ2868	BARRIER (C)	1	
56	VMZ2869	BARRIER (D)	1	
57	VSQ0687	FERRITE CORE	1	
58	VMT0442	SPONGE MAT	1	
59	VJR3	WIRE CLAMPER	2	
B1	XQN26+AG6FZ	SCREW	7	
B2	XTN26+6GFZ	SCREW	4	
B3	XTN26+8GR	SCREW	8	
B4	XTB3+16GFC	SCREW	4	
B5	XTV3+8GFZ	SCREW	1	
B6	XTW3+12TR	SCREW	4	
B7	XSN2+6	SCREW	1	
B8	XTV3+20GR	SCREW	2	
B9	XTV3+8G	SCREW	6	
B10	XTV3+10GR	SCREW	8	
B11	XTV3+6GFZ	SCREW	4	
B12	XTV3+8GFZ	SCREW	6	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

❷ CHASSIS PARTS SECTION (1)

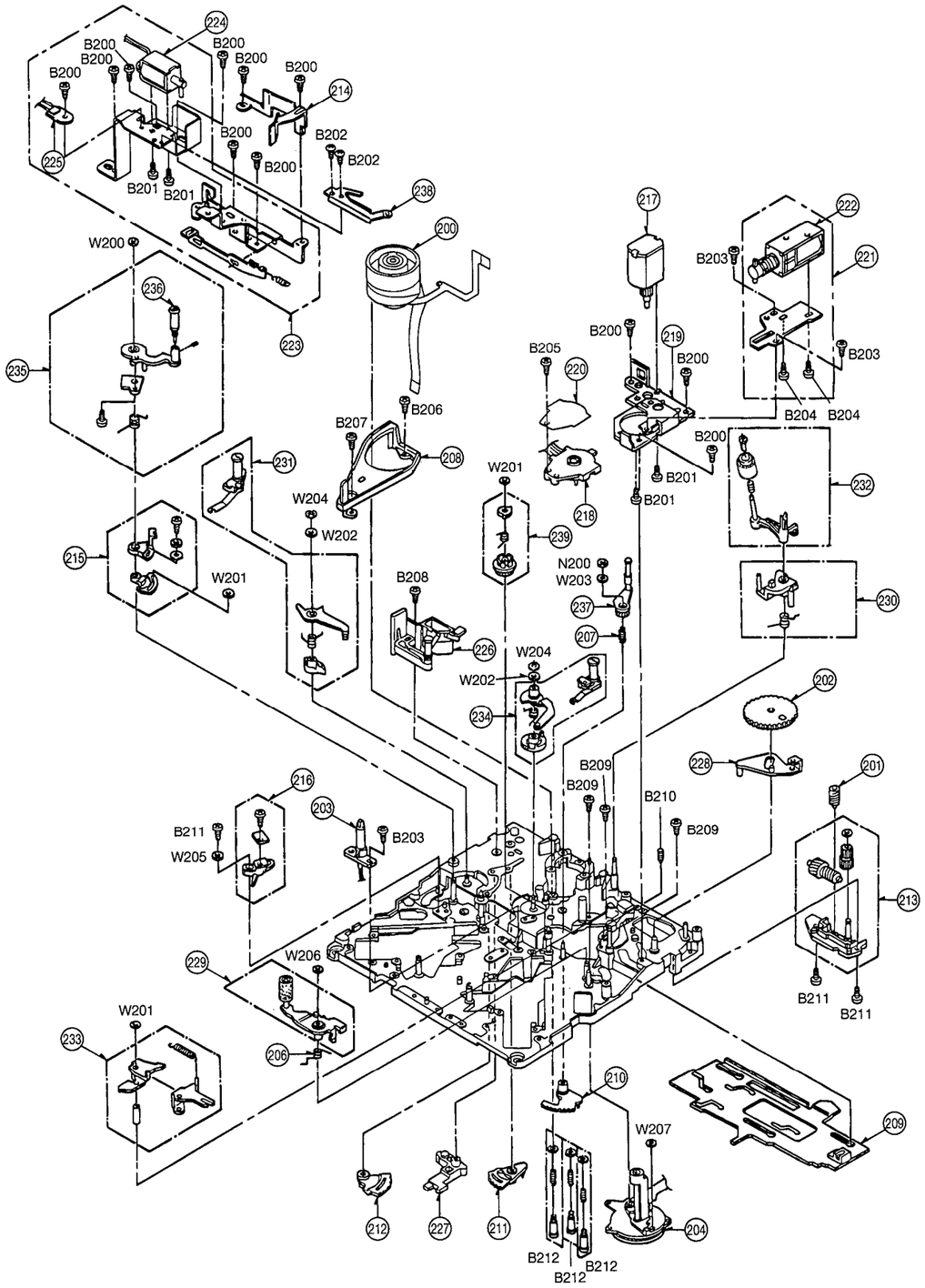


Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
100	VEM0638	S-REEL MOTOR (1) ASS'Y	1	<M>
101	VEM0639	T-REEL MOTOR (1) ASS'Y	1	<M>
102	VMS6462	OUTER SHAFT	2	
103	VMS5924	REEL INNER RAIL	2	
104	VXA6005	SLIDE ROD (1) ASS'Y	1	
105	VXA6006	REEL RELEASE ANGLE1 ASS'Y	1	
106	VXL2589	S BASE DRIVE ARM ASS'Y	1	
107	VXL2590	T BASE DRIVE ARM ASS'Y	1	
B100	VHD0995	SCREW	8	
B101	XQN2+CF3	SCREW	2	
B102	XSB26+4FX	SCREW	3	
W100	VMX1079	CUT WASHER	2	
W101	VMX1394	CUT WASHER	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks

❸ CHASSIS PARTS SECTION (2)

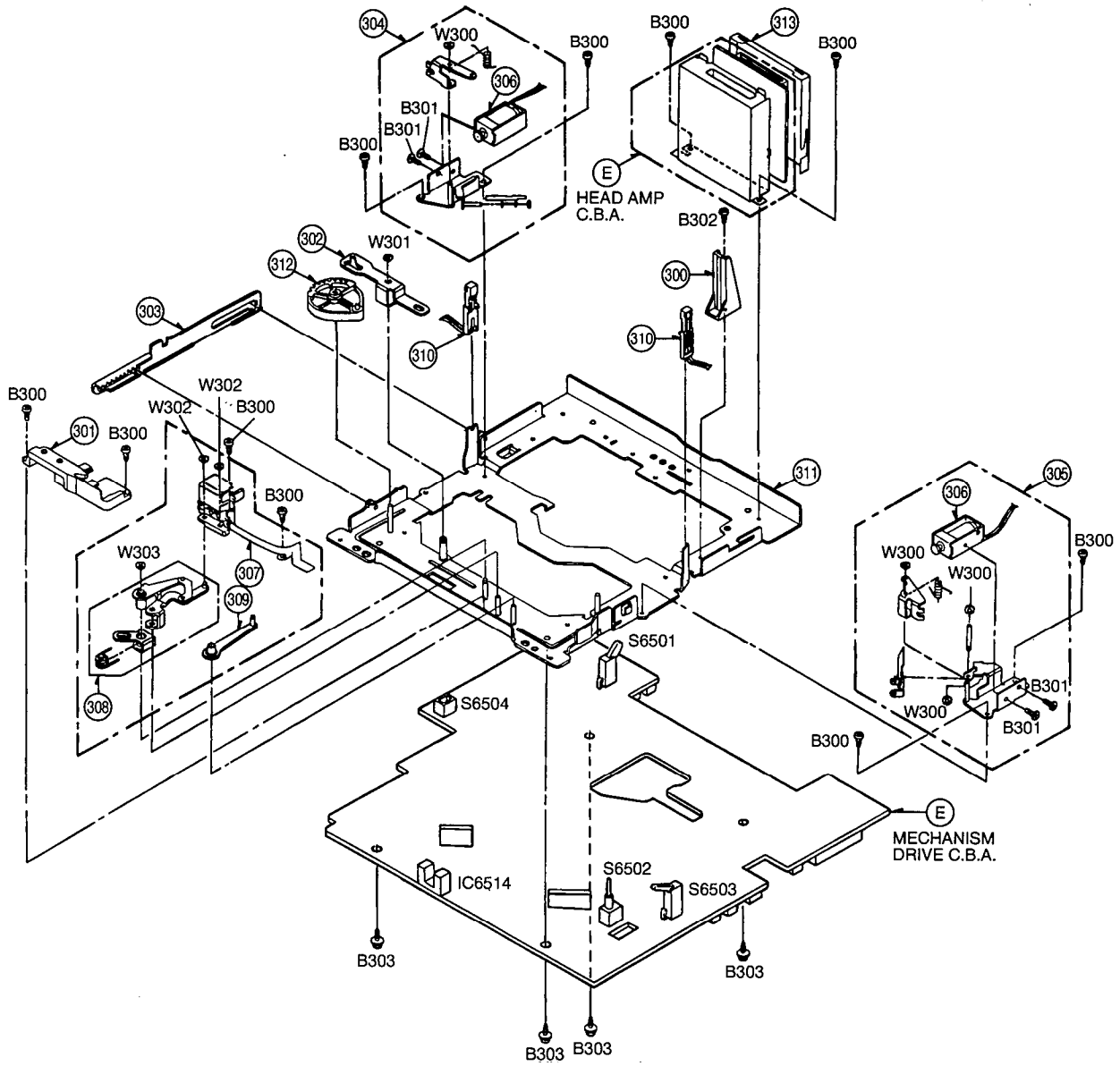


Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
200	VEG1440	CYLINDER UNIT	1	<M>
201	VDG1166	MOTOR WARM GEAR	1	
202	VDG1168	MAIN CAM GEAR	1	<M>
203	VEK8323	LED HOLDER (1) ASS'Y	1	
204	VEM0640	CAPSTAN (1) ASS'Y	1	<M>
206	VMB2933	PINCH RELEASE SPRING	1	
207	VMB2950	T4 THRUST SPRING	1	
208	VMD2533	LOADING RAIL	1	
209	VXA5563	MAIN ROD ASS'Y	1	
210	VXA5564	T4 SECTOR GEAR ASS'Y	1	
211	VXA5567	S SECTOR GEAR ASS'Y	1	
212	VXA5570	T SECTOR GEAR ASS'Y	1	
213	VXA5627	THRUST SHAFT HOLDER ASS'Y	1	
214	VMD3475	T1 GUIDE ASS'Y	1	
215	VXA5791	TENSION LEG SPRING HOOK	1	
216	VXA5820	TENSION SENSOR ASS'Y	1	
217	VEM0645	LOADING MOTOR (1)A ASS'Y	1	<M>
218	VES0814	MODE SW ASS'Y	1	<M>
219	VMA9799	MOTOR ANGLE	1	
220	VMZ2737	MODE SW COVER	1	
221	VXA6009	PINCH SOLENOID BASE (1)	1	
222	VSJ0217	PINCH SOLENOID	1	
223	VXA6010	CLEANER BASE (1) ASS'Y	1	
224	VSJ0222	CLEANING SOLENOID	1	<M>
225	VEK7927	INSULLATION SENSOR	1	
226	VXA6052	S POST BASE A ASS'Y	1	<M>
227	VXL2838	TEN REG. TURN ARM ASS'Y	1	
228	VXL2889	MAIN CAM ARM ASS'Y	1	
229	VXL2835	PINCH ARM ASS'Y	1	<M>
230	VXL2870	T2 ARM ASS'Y	1	
231	VXL2709	S1 LOADING ARM ASS'Y	1	<M>
232	VXL2748	CLEANING ARM A ASS'Y	1	<M>
233	VXL2776	PINCH TURN ARM (1) ASS'Y	1	
234	VXL2839	T LOADING ARM ASS'Y	1	<M>
235	VXL2831	TENSION ARM S (1) ASS'Y	1	<M>
236	VXP1761	TENSION ROLLER	1	
237	VXL2806	T4 ARM (1) ASS'Y	1	
238	VMA9753	STOPPER	1	
239	VXP1683	T4 CONNECTION GEAR ASS'Y	1	
B200	XQN2+CF3	SCREW	11	
B201	XQN2+A2	SCREW	4	
B202	XQN14+CF3	SCREW	2	
B203	XQN2+AM2	SCREW	3	
B204	VHD1101	SCREW	2	
B205	XQN2+CF6	SCREW	1	
B206	XQN2+AM4	SCREW	1	
B207	XQN2+A3	SCREW	1	
B208	XQN2+CF5	SCREW	1	
B209	XQN2+A35FZ	SCREW	3	
B210	VHD0356	SCREW	1	
B211	XQN2+CF4	SCREW	3	
B212	VXQ0439	SCREW	3	
W200	VMX0967	CUT WASHER	1	
W201	VMX1061	WASHER	3	
W202	XWGV15Z32G	WASHER	2	
W203	XWE16VW	WASHER	1	
W204	XUC12FP	E-RING	2	
W205	XWE2	WASHER	1	
W206	VMX1079	CUT WASHER	1	
W207	XWA2B	WASHER	1	
N200	VHN0312	NUT	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks

❹ SUB CHASSIS PARTS SECTION

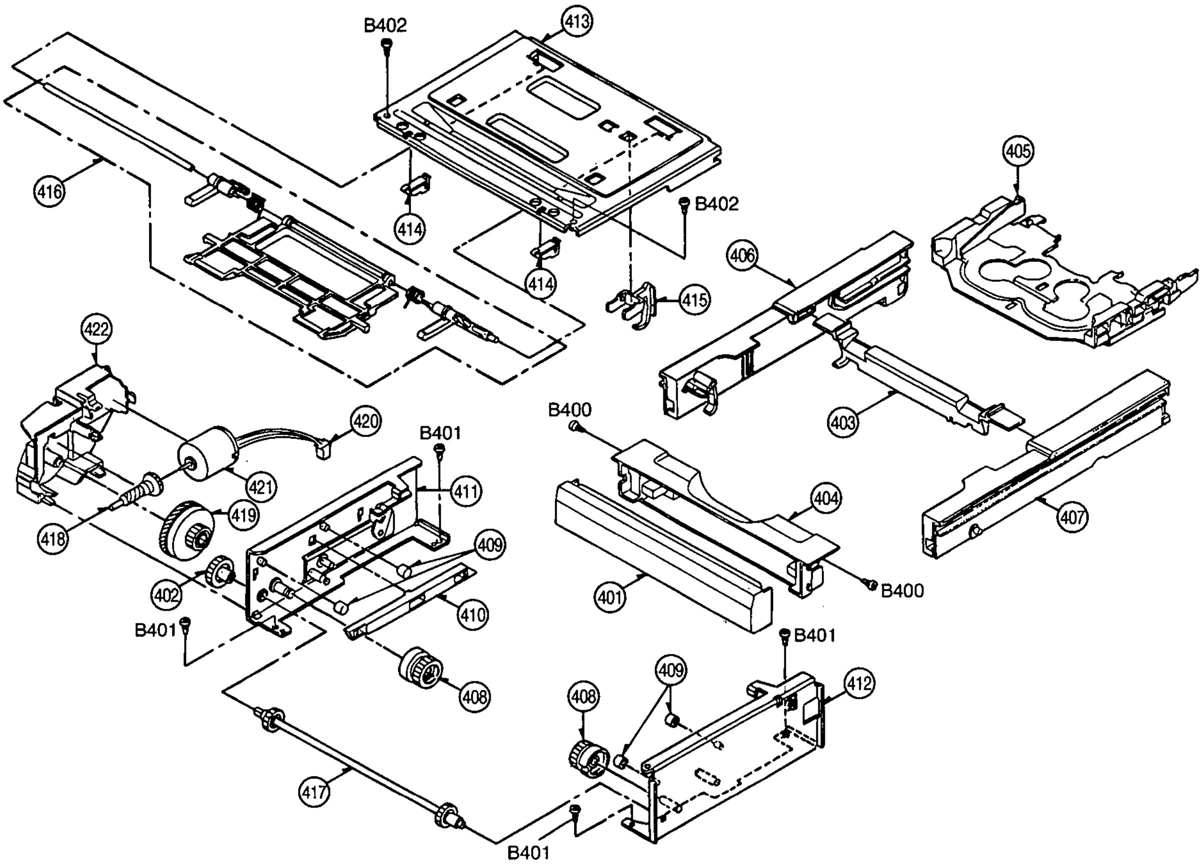


Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
300	VMD3019	TRAY STOPPER A	1	
301	VMD2853	MIC STOPPER	1	
302	VML3292	COMMUNICATION ARM	1	
303	VML3293	TRAY CONNECTION ROD	1	
304	VXA5575	S-BRAKE SOLENOID BASE	1	
305	VXA5887	T-BRAKE SOLENOID BASE	1	
306	VSJ0216	BRAKE SOLENOID	2	<M>
307	VXA6012	MIC CONNECTOR (1) ASS'Y	1	
308	VXL2777	MIC DRIVE ARM (1) ASS'Y	1	
309	VXL2780	MIC SUBLINK ARM (1) ASS'Y	1	
310	VEK8225	PHOTO SENSOR HOLDER (1)	2	
311	VXK1352	SUB CHASSIS (2) ASS'Y	1	
312	VXP1842	LOCK GEAR (1) ASS'Y	1	
313	VSC4699	SHIELD CASE B	1	
B300	XQN2+CF3	SCREW	10	
B301	XQN2+A1.5	SCREW	4	
B302	XQN2+CF4	SCREW	1	
B303	XYN26+J5	SCREW	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
W300	VMX0967	CUT WASHER	4	
W301	VMX0653	CUT WASHER	1	
W302	VMX1548	CUT WASHER	2	
W303	VMX1079	CUT WASHER	1	

❺ CASSETTE TRAY PARTS SECTION

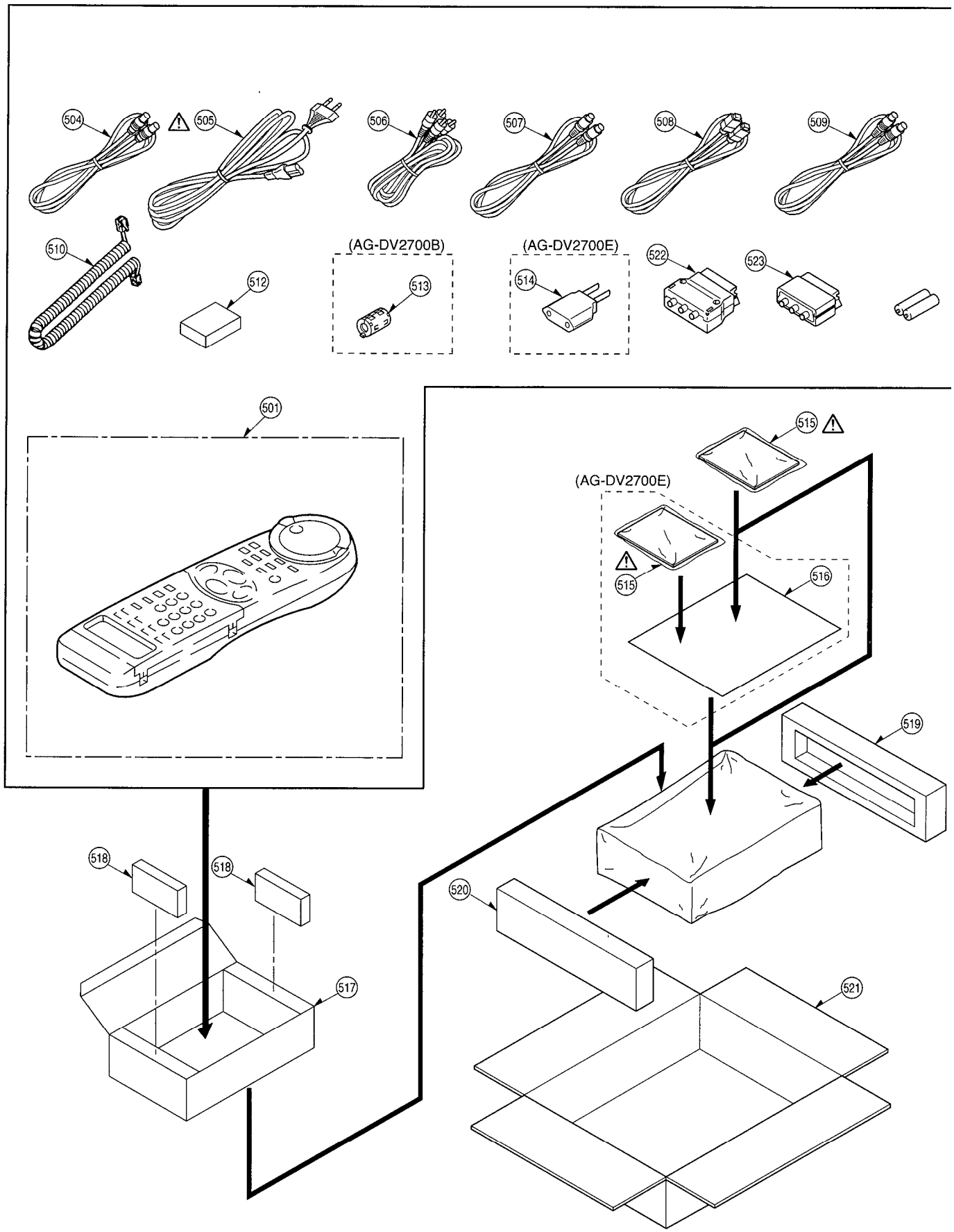


Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
401	VGP4573	TRAY FRONT PANEL	1	
402	VDG1263	SYNCHRO. DRIVE GEAR	1	
403	VMD2845	REAR GUIDE	1	
404	VMD2846	FRONT GUIDE	1	
405	VXA5990	CASSETTE HOLDER ASS'Y	1	
406	VXA5991	S RACK ASS'Y	1	
407	VXA5992	T RACK ASS'Y	1	
408	VDG1260	PINION GEAR	2	
409	VDP1687	ROLLER	4	
410	VMD2847	FRONT PROJECTION	1	
411	VXA6023	SIDE PLATE (S)	1	
412	VXA6024	SIDE PLATE (T)	1	
413	VMA9797	CASSETTE COVER	1	
414	VMD2849	TOP GUIDE	2	
415	VML3286	COVER OPEN LEVER	1	
416	VXA5999	BOOSTER (1) ASS'Y	1	
417	VXA6000	TRAY DRIVE SHAFT ASS'Y	1	
418	VDG1264	WORM GEAR	1	
419	VDG1265	WORM FOIL GEAR	1	
420	VEE0B83	MOTOR WIRE CABLE	1	
421	VEM0644	TRAY MOTOR	1	
422	VMD2850	GEAR BOX	1	
B400	XTB26+8JFZ	SCREW	2	
B401	XSN2+3R	SCREW	4	
B402	XTB2+35FFY	SCREW	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks

❻ PACKING PARTS SECTION



Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
501	EUR571414	REMOTE CONTROLLER	1	
504	VJA0858	S-VHS CABLE	1	
⚠ 505	VJA0940	AC CORD	1	
⚠ 505	VJA0754	AC CORD	1	AG-DV2700E
⚠ 505	VJA1059	AC CORD	1	AG-DV2700E
506	VJA0788	AV OUTPUT CABLE	1	
507	VJA0963	DIN RF CABLE	1	AG-DV2700B
508	VJA1011	DV CABLE	1	
509	VJA0787	EDIT 5P CABLE	1	
510	VJA1045	CONTROLLER CABLE	1	
512	VFK1451	VIDEO HEAD CLEANING TAPE	1	
513	VLF1321	FERRITE CORE	1	AG-DV2700B
514	VJP2974	AC PLUG ADAPTOR	1	
⚠ 515	VQT7776	OPERATING INSTRUCTION	1	(ENGLISH) AG-DV2700E
⚠ 515	VQT7777	OPERATING INSTRUCTION	1	(GERMAN) AG-DV2700E
⚠ 515	VQT7778	OPERATING INSTRUCTION	1	(FRENCH) AG-DV2700E
⚠ 515	VQT7779	OPERATING INSTRUCTION	1	(ITALIAN) AG-DV2700E
⚠ 515	VQT7782	OPERATING INSTRUCTION	1	(CHINESE) AG-DV2700E
⚠ 515	VQT7781	OPERATING INSTRUCTION	1	(RUSSIAN) AG-DV2700E
⚠ 515	VQT7780	OPERATING INSTRUCTION	1	(SPANISH) AG-DV2700E
⚠ 515	VQT7783	OPERATING INSTRUCTION	1	AG-DV2700B
516	VPN5090	PAD	1	
517	VPK2204	ACCESSORIES PACKING	1	
518	VPN4999	SPACER	2	
519	VPN4748	CUSHION (R)	1	
520	VPN4749	CUSHION (L)	1	
521	VPG9745	PACKING CASE	1	AG-DV2700E
521	VPG9744	PACKING CASE	1	AG-DV2700B
522	VFA0151	AV ADAPTOR (IN)	1	
523	VFA0163	AV ADAPTOR (OUT)	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks

4-2. ELECTRICAL REPLACEMENT PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE: Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICROFARADS (uf), P=uuF.
4. The P.C. Board units marked width "■" show below the main assembled parts.
5. The marking (RTL) indicaters the retention time is limited for this item.
After the discontinuation of this assembly in production, it will no longer be available.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP06C40A	MAIN C. B. A.	1	(RTL) AG-DV2700E
■	VEP06C40B	MAIN C. B. A.	1	(RTL) AG-DV2700B
■	VEP03E27A	ANALOG C. B. A.	1	(RTL) INCLUDED IN VEP06E40A/B
■	VEP03E28A	INPUT/OUTPUT C. B. A.	1	(RTL) INCLUDED IN VEP06E40A/B
■	VEP03E29A	REAR JACK C. B. A.	1	(RTL) INCLUDED IN VEP03E28A/B
■	VEP07801AR	TV DEMODULATOR PACK C. B. A.	1	(RTL) AG-DV2700E INCLUDED IN VEP06E40A
■	VEP07801AQ	TV DEMODULATOR PACK C. B. A.	1	(RTL) AG-DV2700B INCLUDED IN VEP06E40B
■	VEP07973B	NICAM DECODER C. B. A.	1	(RTL) AG-DV2700E INCLUDED IN VEP06E40A
■	VEP07973A	NICAM DECODER C. B. A.	1	(RTL) AG-DV2700B INCLUDED IN VEP06E40B
■	VEP06C89A	MOTOR DRIVE C. B. A.	1	(RTL) INCLUDED IN VEP06E40A/B
■	VEP03E55A	DIGITAL C. B. A.	1	(RTL) INCLUDED IN VEP06E40A/B
■	VEP04669B	AUDIO C. B. A.	1	(RTL) INCLUDED IN VEP06E40A/B
■	VEP05351A	HEAD AMP C. B. A.	1	(RTL)
■	VEP02557B	MECHANISM DRIVE C. B. A.	1	(RTL)
■	VEP07977A	TIMER C. B. A.	1	(RTL)
■	VEP04695A	FRONT (L) C. B. A.	1	(RTL)
■	VEP04696D	FRONT (R) C. B. A.	1	(RTL)
■	VEP07966A	MODULAR C. B. A.	1	(RTL)
■	VEP07965A	FRONT LED C. B. A.	1	(RTL)
■	VEP07968B	IR C. B. A.	1	(RTL)
■	VEP03E18A	5P JACK C. B. A.	1	(RTL)
■	VEP07967A	DV JACK C. B. A.	1	(RTL)
■	VEP01814A	POWER SUPPLY C. B. A.	1	(RTL)
	ENG47288G1	TUNER	1	AG-DV2700E
	ENG47289G1	TUNER	1	AG-DV2700B
F1101	XBA2C16TH15	FUSE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP06C40A	MAIN C. B. A.	1	(RTL) AG-DV2700E
■	VEP06C40B	MAIN C. B. A.	1	(RTL) AG-DV2700B
■	VEP03E27A	ANALOG C. B. A.	1	(RTL) INCLUDED IN VEP06C40A/B
■	VEP03E28A	INPUT/OUTPUT C. B. A.	1	(RTL) INCLUDED IN VEP06C40A/B
■	VEP03E29A	REAR JACK C. B. A.	1	(RTL) INCLUDED IN VEP03E28A
■	VEP07801AR	TV MODULATOR PACK C. B. A.	1	(RTL) INCLUDED IN VEP06C40A
■	VEP07801AQ	TV MODULATOR PACK C. B. A.	1	(RTL) INCLUDED IN VEP06C40B
■	VEP07973B	NICAM DECODER C. B. A.	1	(RTL) INCLUDED IN VEP06C40A
■	VEP07973A	NICAM DECODER C. B. A.	1	(RTL) INCLUDED IN VEP06C40B
■	VEP06C89A	MOTOR DRIVE C. B. A.	1	(RTL) INCLUDED IN VEP06C40A/B
■	VEP03E55A	DIGITAL C. B. A.	1	(RTL) INCLUDED IN VEP06C40A/B
■	VEP04669B	AUDIO C. B. A.	1	(RTL) INCLUDED IN VEP06C40A/B
C0701-03	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	3	
C0704	ECUX1H331JCV	C. CAPACITOR CH 50V 330P	1	
C0705	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1	
C0706	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0707, 08	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C0709	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C0710	ECUX1H470JPV	C. CAPACITOR CH 50V 47P	1	
C0711	ECEA1CKA220	E. CAPACITOR 16V 22U	1	
C0712	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0714	ECQB1H473JF	P. CAPACITOR 50V 0.047U	1	
C0715	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C0716	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C0717	ECUX1H270JPV	C. CAPACITOR CH 50V 27P	1	
C0718	ECEA1HKSR47	E. CAPACITOR 50V 0.47U	1	
C0719	ECUX1H180JCV	C. CAPACITOR CH 50V 18P	1	
C0720	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0722	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0723	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0724	ECQB1H473JF	P. CAPACITOR 50V 0.047U	1	
C0726	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0729	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C0730	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0732	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C1001	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1002	ECEA1AKS470	E. CAPACITOR 10V 47U	1	
C1003	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1004	ECEA1AKS470	E. CAPACITOR 10V 47U	1	
C1009	ECEA1AKS221	E. CAPACITOR 10V 220U	1	
C1010	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C1011, 12	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C1013	ECUX1H473KBN	C. CAPACITOR CH 50V 0.047U	1	
C1014	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C1016	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C1018	ECEA1HKS010	E. CAPACITOR 50V 1U	1	
C1019	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C1022	ECEA1HKS010	E. CAPACITOR 50V 1U	1	
C1023	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C1024	ECEA1CKS470	E. CAPACITOR 16V 47U	1	
C1025	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C1026	ECUX1H682KBN	C. CAPACITOR CH 50V 6800P	1	
C1027	ECEA1CKS100	E. CAPACITOR 16V 10U	1	
C1028	ECA1CM332	E. CAPACITOR 16V 3300U	1	
C1029	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C1030	ECA1CM332	E. CAPACITOR 16V 3300U	1	
C1031	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C1032	ECA1CM332	E. CAPACITOR 16V 3300U	1	
C1033, 34	ECEA1HKS010	E. CAPACITOR 50V 1U	2	
C1035-40	ECEA0JKS101	E. CAPACITOR 6.3V 100U	6	
C1041	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C1042	ECEA1HKS010	E. CAPACITOR 50V 1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1043	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1045	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1047, 48	ECEA0JKS101	E. CAPACITOR 6.3V 100U	2	
C1049	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C1050, 51	ECEA1CKS101	E. CAPACITOR 16V 100U	2	
C1054, 55	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C1056	ECEA1CKS470	E. CAPACITOR 16V 47U	1	
C1057	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C1058	ECEA1EKS330	E. CAPACITOR 25V 33U	1	
C1059	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C1060	ECEA0JKS470	E. CAPACITOR 6.3V 47U	1	
C1061	ECEA1CKS101	E. CAPACITOR 16V 100U	1	
C1062	ECEA1EKS330	E. CAPACITOR 25V 33U	1	
C1063	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1064	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2002-04	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	3	
C2005, 06	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	2	
C2007-09	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	3	
C2010	ECST0JD107Z	T. CAPACITOR CH6.3V 100U	1	
C2011-13	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	3	
C2014, 15	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C2016, 17	ECST1VX335Z	T. CAPACITOR CH 35V 3.3U	2	
C2018	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C2019	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C2020	ECST0JX226Z	T. CAPACITOR CH6.3V 22U	1	
C2021	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C2022	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C2023	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C2024	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C2025	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C2026	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C2027-30	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C2031-33	ECST1VX335Z	T. CAPACITOR CH 35V 3.3U	3	
C2201, 02	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C2203	ECEA0JKS330	E. CAPACITOR 6.3V 33U	1	
C2204	ECEA0JKS470	E. CAPACITOR 6.3V 47U	1	
C2205	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2207, 08	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C2209	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C2210	ECUX1H200JCN	C. CAPACITOR CH 50V 20P	1	
C2211, 12	ECUM1H060CCN	C. CAPACITOR CH 50V 6P	2	
C2213	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C2214	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2215	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C2216	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2217	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2218	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C2222	ECEA0JKS470	E. CAPACITOR 6.3V 47U	1	
C2223	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2225, 26	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C2227	VCE0073	CAPACITOR (N) UNIT	1	
C2228	ECEA1AKS221	E. CAPACITOR 10V 220U	1	
C2229	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2231	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2233	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2234	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C2235	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C2236-41	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	6	
C2501	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2502, 03	ECEA1CKA101	E. CAPACITOR 16V 100U	2	
C2505, 06	ECEA1CKA101	E. CAPACITOR 16V 100U	2	
C2507, 08	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C2509	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C2510	ECUX1H682KBN	C. CAPACITOR CH 50V 6800P	1	
C2511	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C2512, 13	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C2514	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2515	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C2519, 20	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C2521	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C2522	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2523, 24	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C2525	ECUX1H682KBN	C. CAPACITOR CH 50V 6800P	1	
C2526	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C2527	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2528, 29	ECUX1H682KBN	C. CAPACITOR CH 50V 6800P	2	
C2530, 31	ECEA1CKA101	E. CAPACITOR 16V 100U	2	
C3001	ECUX1A105KBN	C. CAPACITOR CH 10V 1U	1	
C3002	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3003	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3004, 05	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	2	
C3006	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3007, 08	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	2	
C3010-12	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	3	
C3013	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3014	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3015	ECST1CY335Z	T. CAPACITOR CH 16V 3.3U	1	
C3016	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3017	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3018	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3019	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3020	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3021	ECST1CY335Z	T. CAPACITOR CH 16V 3.3U	1	
C3023	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C3024	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C3025	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C3026	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C3027	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	1	
C3028-30	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	3	
C3031	ECUX1A105KBN	C. CAPACITOR CH 10V 1U	1	
C3032	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3033	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3034	ECUX1E273KBV	C. CAPACITOR CH 25V 0.027U	1	
C3035	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3036	ECUX1H100CCV	C. CAPACITOR CH 50V 10P	1	
C3037	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3038, 39	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	2	
C3040, 41	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	2	
C3042	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3043, 44	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C3045-48	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4	
C3049-54	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	6	
C3056	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C3057	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3059	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3060	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C3061	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C3062-65	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C3067	ECST0JX226Z	T. CAPACITOR CH6.3V 22U	1	
C3068-72	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	5	
C3073-77	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	5	
C3078, 79	ECUX1H070CCV	C. CAPACITOR CH 50V 7P	2	
C3080	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3081	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C3082	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C3083	ECUX1C474KBN	C. CAPACITOR CH 16V 0.47U	1	
C3084	ECUX1C224ZFV	C. CAPACITOR CH 16V 0.22U	1	
C3085	ECUX1H473ZFV	C. CAPACITOR CH 50V 0.047U	1	
C3086, 87	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C3090, 91	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C3092	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C3093-96	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	4	
C3097, 98	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C3099-02	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4	
C3103	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3104-07	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C3108	ECUX1C224ZFV	C. CAPACITOR CH 16V 0.22U	1	
C3109, 10	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	2	
C3111, 12	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C3113-15	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	3	
C3116, 17	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	2	
C3201, 02	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C3203, 04	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C3205	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3206	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3207	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C3208	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C3209, 10	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2	
C3211-13	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	3	
C3214	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3215	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3216-18	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	3	
C3219	ECUX1E273KBV	C. CAPACITOR CH 25V 0.027U	1	
C3220	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C3221	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C3222	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C3223	ECUX1A105KBN	C. CAPACITOR CH 10V 1U	1	
C3224	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3225, 26	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	2	
C3227	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C3228	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C3229	ECUX1H331JCV	C. CAPACITOR CH 50V 330P	1	
C3230	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C3231	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C3232	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3233	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C3234, 35	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2	
C3236	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C3237, 38	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2	
C3239	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3240	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3241, 42	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C3243	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3244	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C3245	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3246	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C3247	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3248, 49	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	2	
C3250	ECUX0J225KBN	C. CAPACITOR CH6.3V 2.2U	1	
C3251-53	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	3	
C3254	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C3255, 56	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2	
C3257	ECST0JX476Z	T. CAPACITOR CH6.3V 47U	1	
C3258	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C3259	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3260	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C3261	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3262	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3263	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C3267	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3280	ECST0JD107Z	T. CAPACITOR CH6.3V 100U	1	
C3281	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3282	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C3283	ECST0JX476Z	T. CAPACITOR CH6.3V 47U	1	
C3284	ECUX1H100CCV	C. CAPACITOR CH 50V 10P	1	
C3301	ECUX0J104KBQ	C. CAPACITOR CH6.3V 0.1U	1	
C3302	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3303, 04	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	2	
C3305	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3306-10	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	5	
C3311	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3312	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	1	
C3313-16	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	4	
C3317	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	1	
C3318	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3319	ECUX1H470JCQ	C. CAPACITOR CH 50V 47P	1	
C3320	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	1	
C3321	ECUX1H470JCQ	C. CAPACITOR CH 50V 47P	1	
C3322-27	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	6	
C3328	ECUX0J104KBQ	C. CAPACITOR CH6.3V 0.1U	1	
C3329, 30	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	2	
C3331	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3332, 33	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	2	
C3335	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	1	
C3337	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	1	
C3338	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3339	ECUX0J104KBQ	C. CAPACITOR CH6.3V 0.1U	1	
C3340	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3341, 42	ECUX0J104KBQ	C. CAPACITOR CH6.3V 0.1U	2	
C3343-50	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	8	
C3351	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	1	
C3352, 53	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	2	
C3354-56	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	3	
C3357	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3360, 61	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3362	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3363-65	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	3	
C3367-70	ECUX0J104KBQ	C. CAPACITOR CH6.3V 0.1U	4	
C3371, 72	ECUX1H101JCQ	C. CAPACITOR CH 50V 100P	2	
C3374-78	ECUX0J104KBQ	C. CAPACITOR CH6.3V 0.1U	5	
C3379	ECUX1E102KBQ	C. CAPACITOR CH 25V 1000P	1	
C3380	ECST0JX476Z	T. CAPACITOR CH6.3V 47U	1	
C3601	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3602	ECEA0JKS470	E. CAPACITOR 6.3V 47U	1	
C3603	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3604	ECEA0JKS470	E. CAPACITOR 6.3V 47U	1	
C3605	ECA0JM221	E. CAPACITOR 6.3V 220U	1	
C3606	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3607	ECEA1CKS100	E. CAPACITOR 16V 10U	1	
C3608	ECA0JM331	E. CAPACITOR 6.3V 330U	1	
C3609	ECEA1CKS100	E. CAPACITOR 16V 10U	1	
C3610	ECA0JM331	E. CAPACITOR 6.3V 330U	1	
C3611	ECEA1HKS010	E. CAPACITOR 50V 1U	1	
C3614, 15	ECEA1HKS010	E. CAPACITOR 50V 1U	2	
C3616	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3617	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C3618, 19	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C3620	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3621	ECQP1392JZ	CAPACITOR (D) UNIT	1	
C3622	ECUM1H152KBN	C. CAPACITOR CH 50V 1500P	1	
C3623	ECEA0JKS330	E. CAPACITOR 6.3V 33U	1	
C3624	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C3625	ECEA1HKGR68	E. CAPACITOR 50V 0.68U	1	
C3626	ECUX1H561JCN	C. CAPACITOR CH 50V 560P	1	
C3627	ECEA1AKS221	E. CAPACITOR 10V 220U	1	
C3628	ECEA1EKS4R7	E. CAPACITOR 25V 4.7U	1	
C3629	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C3630	ECUM1C334KBM	C. CAPACITOR CH 16V 0.33U	1	
C3631	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3632	ECQV1H683JL	P. CAPACITOR 50V 0.068U	1	
C3633	ECUM1H152KBN	C. CAPACITOR CH 50V 1500P	1	
C3634	ECEA1HKS010	E. CAPACITOR 50V 1U	1	
C3701, 02	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C3703	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C3704-06	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	3	
C3707	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C3710-12	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	3	
C3713	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3714	ECUX1H271JCV	C. CAPACITOR CH 50V 270P	1	
C3715-18	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C3719-21	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	3	
C3722-25	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C3726	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C3901	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C3902	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3903	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C3904	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3905	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C3906	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C3907	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3908	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3909	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4001	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4002	ECEA1EKS4R7	E. CAPACITOR 25V 4.7U	1	
C4003	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4004	ECEA1CKS101	E. CAPACITOR 16V 100U	1	
C4005	VCEA1CAW220	E. CAPACITOR 16V 22U	1	
C4006	ECUX1H223KBN	C. CAPACITOR CH 50V 0.22U	1	
C4007	VCEA1CAW220	E. CAPACITOR 16V 22U	1	
C4008	ECHR1H223JZ	CAPACITOR (P) UNIT	1	
C4009, 10	VCEA1CAS102	E. CAPACITOR 16V 1000U	2	
C4011	ECHR1H223JZ	CAPACITOR (P) UNIT	1	
C4012	VCEA1CAW220	E. CAPACITOR 16V 22U	1	
C4203	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C4206	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C4207	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C4211	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C4212	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C4213	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4214	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4215	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C4217	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C4218	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4219	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C4220, 21	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C4222, 23	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	2	
C4224, 25	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	2	
C4302	VCEA1AAE101	E. CAPACITOR 10V 100U	1	
C4303	ECHR1H103JZ	P. CAPACITOR 50V 0.01U	1	
C4304	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4305	VCEA0JAE221	E. CAPACITOR 6.3V 220U	1	
C4306	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4307	VCEA0JAE221	E. CAPACITOR 6.3V 220U	1	
C4308	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4309	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C4310	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4311	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4312	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C4313	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4314	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C4315	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4316	VCEA1CAE100	E. CAPACITOR 16V 10U	1	
C4317	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4318	ECUM1E683KBN	C. CAPACITOR CH 25V 0.063U	1	
C4319	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4320	VCEA0JAE470	E. CAPACITOR 6.3V 47U	1	
C4321	ECHR1H103JZ	P. CAPACITOR 50V .0.01U	1	
C4322	ECUM1E683KBN	C. CAPACITOR CH 25V 0.063U	1	
C4323	VCEA1CAE100	E. CAPACITOR 16V 10U	1	
C4324	ECUM1E683KBN	C. CAPACITOR CH 25V 0.063U	1	
C4325, 26	VCEA1HAE2R2	E. CAPACITOR 50V 2.2U	2	
C4327	VCEA0JAE470	E. CAPACITOR 6.3V 47U	1	
C4328	ECHR1H103JZ	P. CAPACITOR 50V 0.01U	1	
C4329, 30	VCEA1HAE2R2	E. CAPACITOR 50V 2.2U	2	
C4331	ECUM1E683KBN	C. CAPACITOR CH 25V 0.063U	1	
C4332, 33	VCEA1CAE100	E. CAPACITOR 16V 10U	2	
C4334	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4335, 36	VCEA1HAE2R2	E. CAPACITOR 50V 2.2U	2	
C4337	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4338	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C4339	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4340, 41	VCEA1HAE2R2	E. CAPACITOR 50V 2.2U	2	
C4342-44	VCEA1CAE100	E. CAPACITOR 16V 10U	3	
C4345, 46	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C4347, 48	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C4349	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4350	VCEA1CAE100	E. CAPACITOR 16V 10U	1	
C4351	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4352	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C4353	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4354	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C4355	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4356	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4357	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4358	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4359	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4360	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4361, 62	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C4363	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4364	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4365, 66	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C4367	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4368	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4371	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C4372	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4373, 74	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	2	
C4377	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4378	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C4379-81	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	3	
C4382	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C4384, 85	ECUX1C393KBV	C. CAPACITOR CH 16V 0.039U	2	
C4501, 02	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C4503-05	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	3	
C4506	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C4515	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4701	ECEA1CKS100	E. CAPACITOR 16V 10U	1	
C4702, 03	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C4704, 05	ECEA1CKS100	E. CAPACITOR 16V 10U	2	
C4706	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4707	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4708-11	VCEA1CAW100	E. CAPACITOR 16V 10U	4	
C4901-04	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	4	
C4905	ECEA1AKA470	E. CAPACITOR 10V 47U	1	
C4906	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4907-14	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	8	
C6001	ECUX1C274KBN	C. CAPACITOR CH 16V 0.27U	1	
C6002	ECST0JD107Z	T. CAPACITOR CH6.3V 100U	1	
C6003	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6004	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C6005	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6006, 07	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	2	
C6008	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6009, 10	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2	
C6011, 12	ECUX1E223KBV	C. CAPACITOR CH 25V 0.023U	2	
C6015	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C6017, 18	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C6019	ECST0JD107Z	T. CAPACITOR CH6.3V 100U	1	
C6020	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6021	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C6022-25	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C6026	ECST0JD107Z	T. CAPACITOR CH6.3V 100U	1	
C6027	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6028-30	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	3	
C6033, 34	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	2	
C6035	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6036	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C6041	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C6043	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C6044	ECST0JX226Z	T. CAPACITOR CH6.3V 22U	1	
C6045, 46	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C7301	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7302	VCEA0JAW101	E. CAPACITOR 6.3V 100U	1	
C7303	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7304	VCEA0JAW101	E. CAPACITOR 6.3V 100U	1	
C7307	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C7308	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C7311	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
C7312, 13	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C7315	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C7316	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C7317	VCEA1CAW100	E. CAPACITOR 16V 10U	1	
C7318	VCEA0JAW470	E. CAPACITOR 6.3V 47U	1	
C7319, 20	VCEA1CAW100	E. CAPACITOR 16V 10U	2	
C7321	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C7322, 23	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2	
C7324-26	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	3	
C7327	ECUM1C334KBN	C. CAPACITOR CH 16V 0.33U	1	
C7328	ECUX1E333KBN	C. CAPACITOR CH 16V 0.033U	1	
C7329	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C7330	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	1	
C7601	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7602	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7604	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7607	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7608	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7610	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7611	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7614	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7615, 16	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2	
C7651	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7652, 53	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7654	ECEA1CKS100	E. CAPACITOR 16V 10U	1	
C7909	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7910	ECEA0JKS470	E. CAPACITOR 6.3V 47U	1	
C7911	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30001, 02	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C30003	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C30004, 05	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C30006	ECQB1H153JF	P. CAPACITOR 50V 0.015U	1	
C30007	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C30008	ECUM1H332KBN	C. CAPACITOR CH 50V 3300P	1	
C30009	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C30010	EEVHB0J101	E. CAPACITOR 6.3V 100U	1	
C30011	EEVHB1H3R3	E. CAPACITOR 50V 3.3U	1	
C30012, 13	EEVHB1C100	E. CAPACITOR 16V 10U	2	
C30014	EEVHB1H4R7	E. CAPACITOR 50V 4.7U	1	
C30015	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C30016	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C30018	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C30019	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30020	EEVHB0J101	E. CAPACITOR 6.3V 100U	1	
C30021	EEVHB0J470	E. CAPACITOR 6.3V 47U	1	
C30022	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30023	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30024	EEVHB0J470	E. CAPACITOR 6.3V 47U	1	
C30025	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30026	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C30027	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	1	
C30028	EEVHB0J220	E. CAPACITOR 6.3V 22U	1	
C30029, 30	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	2	
C30031, 32	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	2	
C30033	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	1	
C30034	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C30035	EEVHB0J220	E. CAPACITOR 6.3V 22U	1	
C30036	EEVHB0J101	E. CAPACITOR 6.3V 100U	1	
C30037	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30038-40	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	3	
C30041	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C30042	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1	
C30043	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C30044	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	1	
C30045, 46	EEVHB1C100	E. CAPACITOR 16V 10U	2	
C30047, 48	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C30049	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C30050	EEVHP1HR47	E. CAPACITOR 50V 47U	1	
C30051	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30052	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C30053, 54	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C30055	EEVHB0J220	E. CAPACITOR 6.3V 22U	1	
C30056	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C30057	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C30058	ECUX1H391JCV	C. CAPACITOR CH 50V 390P	1	
C30059	EEVHB0J470	E. CAPACITOR 6.3V 47U	1	
C30060	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30061	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	1	
C30063	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C30064	EEVHB1H4R7	E. CAPACITOR 50V 4.7U	1	
C30065	EEVHB1H2R2	E. CAPACITOR 50V 2.2U	1	
C30066	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C30067	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C30068	EEVHB0J101	E. CAPACITOR 6.3V 100U	1	
C30069	ECUX1A105ZFV	C. CAPACITOR CH 10V 1U	1	
C30070	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C30071	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C30072	EEVHB0J470	E. CAPACITOR 6.3V 47U	1	
C30073	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C30075	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C30076	EEVHB1H1R0	E. CAPACITOR 50V 1U	1	
C30077	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C30078	ECUX1H561JCN	C. CAPACITOR CH 50V 560P	1	
C30079	EEVHB1H3R3	E. CAPACITOR 50V 3.3U	1	
C30080	ECUX1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C30081	EEVHB0J101	E. CAPACITOR 6.3V 100U	1	
C30083	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C30084	EEVHB0J101	E. CAPACITOR 6.3V 100U	1	
C30085	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C30086	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C30087	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	
C30088	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C30089, 90	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C30091	EEVHB1H2R2	E. CAPACITOR 50V 2.2U	1	
C30092	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30093, 94	ECUM1H080CCN	C. CAPACITOR CH 50V 8P	2	
C30095-98	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C30099	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C30100	EEVHB0J101	E. CAPACITOR 6.3V 100U	1	
C30101	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30102	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C30103	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30104	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C30105	ECUX1H200JCN	C. CAPACITOR CH 50V 20P	1	
C30106	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30107	EEVHB0J101	E. CAPACITOR 6.3V 100U	1	
C30108	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30109	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C30110	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30111	EEVHB0J470	E. CAPACITOR 6.3V 47U	1	
C30113	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30114	EEVHP1H1R0	E. CAPACITOR 50V 1U	1	
C30116	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C30117-19	EEVHB1E4R7	E. CAPACITOR 25V 4.7U	3	
C30120	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	1	
C30122	EEVHB0J470	E. CAPACITOR 6.3V 47U	1	
C30123	EEVHB0J220	E. CAPACITOR 6.3V 22U	1	
C30124	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30125	ECUM1H271JCN	C. CAPACITOR CH 50V 270P	1	
C30126	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30127	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C30128	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30130	EEVHB1H1R0	E. CAPACITOR 50V 1U	1	
C30131	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C30132	EEVHB0J470	E. CAPACITOR 6.3V 47U	1	
C30133	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30134	EEVHB0J220	E. CAPACITOR 6.3V 22U	1	
C30135	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1	
C30136	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C30137	EEVHB1H1R0	E. CAPACITOR 50V 1U	1	
C30138	EEVHP1H1R0	E. CAPACITOR 50V 1U	1	
C30139-41	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	3	
C30142	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	1	
C30143	ECUM1H390JCN	C. CAPACITOR CH 50V 39P	1	
C30145	EEVHB0J101	E. CAPACITOR 6.3V 100U	1	
C30146	EEVHB0J470	E. CAPACITOR 6.3V 47U	1	
C30147, 48	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C30149	EEVHP1A100	E. CAPACITOR 10V 10U	1	
C30150	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30151	EEVHP1A100	E. CAPACITOR 10V 10U	1	
C30152	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30155	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C30156	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C30157	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C30159	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C30160	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	1	
C30161, 62	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C30165	EEVHB0J470	E. CAPACITOR 6.3V 47U	1	
C30186	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C30187	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C30188	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C30189	ECUM1H181JCN	C. CAPACITOR CH 50V 180P	1	
C30190	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
D1001	MA165	DIODE	1	
D1002	MA4051-L	DIODE	1	
D1003	MA165	DIODE	1	
D1004	MA4051-L	DIODE	1	
D1005	MA165	DIODE	1	
D1008, 09	MA165	DIODE	2	
D1010	11ES1	DIODE	1	
D1011	21DQ04	DIODE	1	
D1013	MA4120-M	DIODE	1	
D1014	MA165	DIODE	1	
D1017	MA4062L	DIODE	1	
D1020	MA4082-L	DIODE	1	
D1021	MA4200M	DIODE	1	
D1022	MA4051-M	DIODE	1	
D1023, 24	MA165	DIODE	2	
D1025	MA723	DIODE	1	
D1026	MA165	DIODE	1	
D1027, 28	MA4024-L	DIODE	2	
D2001	MA728	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D2003-05	1SS355	DIODE	3	
D2006-14	MA728	DIODE	9	
D2201, 02	MA165	DIODE	2	
D2203-05	MA723	DIODE	3	
D2206	MA720	DIODE	1	
D2207	MA723	DIODE	1	
D2208	MA165	DIODE	1	
D2209	MA720	DIODE	1	
D2210	MA165	DIODE	1	
D2211	MA720	DIODE	1	
D2501	AK04	DIODE	1	
D2503	AK04	DIODE	1	
D2505	AK04	DIODE	1	
D2507	AK04	DIODE	1	
D3002	MA728	DIODE	1	
D3003	MA151K	DIODE	1	
D3201	MA142WA	DIODE	1	
D3601	MA721WK	DIODE	1	
D3602	MA721WA	DIODE	1	
D3603	MA720	DIODE	1	
D3604	MA151WA	DIODE	1	
D3901-03	MA165	DIODE	3	
D3904, 05	MA4056-M	DIODE	2	
D3906	MA165	DIODE	1	
D4002, 03	MA165	DIODE	2	
D4301	MA151K	DIODE	1	
D4302	MA153	DIODE	1	
D4501	MA721	DIODE	1	
D4701	MA720	DIODE	1	
D4702	MA151WK	DIODE	1	
D6002-05	1SS355	DIODE	4	
D6007, 08	1SS355	DIODE	2	
D7302	BB135	DIODE	1	
D7601	MA4300	DIODE	1	
D7602, 03	MA165	DIODE	2	
D7653	MA723	DIODE	1	
D30001	MA151K	DIODE	1	
D30002	MA8027-H	DIODE	1	
D30003	MA28W	DIODE	1	
D30004	MA142K	DIODE	1	
D30005	MA151K	DIODE	1	
D30006	MA8033-L	DIODE	1	
D30007	MA142K	DIODE	1	
D30008	MA151K	DIODE	1	
D30009	MA721	DIODE	1	
D30010	MA151K	DIODE	1	
FL7301	VLF0633	FILTER	1	
FL7601	ELB4H020	FILTER	1	
FL30001	ELB4Y029B	FILTER	1	
FL30002	VLF1367	FILTER	1	
FP3201	VJS3251	CONNECTOR (FEMALE)	1	
IC0701	LA7576	IC	1	
IC1001	UPC1093J	IC	1	
IC1003	NJM4565MD	IC	1	
IC1004	NJM2904M	IC	1	
IC1005	RN5RG22AA	IC	1	
IC1006, 07	NJM4565MD	IC	2	
IC1008	RN5RZ50BA	IC	1	
IC1009	PQ20VB2E	IC	1	
IC2001	M31020VLED	IC	1	
IC2002	UPD4721GS	IC	1	
IC2004	S29L331AFS	IC	1	
IC2005	D7840376K508	IC	1	
IC2006	MM1320ENRE	IC	1	
IC2201	S80743AL	IC	1	
IC2202	BU4052BCF	IC	1	
IC2203	M37777VACX	IC	1	
IC2204	M6M80041P	IC	1	
IC2205	M38027V4EM	IC	1	
IC2206	TCHC4538AF	IC	1	
IC2207, 08	M66010GP	IC	2	
IC2209	S80743AL	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC2210	PST7028-T	IC	1	
IC2211-13	TC7W74F	IC	3	
IC2214	TC7W08F	IC	1	
IC2215	TC7SH32F	IC	1	
IC2216	TC7S08F	IC	1	
IC2502	TL1453CNS	IC	1	
IC3001	T9P90EF	IC	1	
IC3002	MN47V07AF	IC	1	
IC3003	MN67373	IC	1	
IC3004	M52387FP	IC	1	
IC3005	BH7086KV	IC	1	
IC3006	M52684AFP	IC	1	
IC3007	TC7SH00FU	IC	1	
IC3008	T200G52F0001	IC	1	
IC3009	TC7SH08FU	IC	1	
IC3010	RN5RZ30BA	IC	1	
IC3201	M65500FP	IC	1	
IC3202	UPD42S4260B8	IC	1	
IC3203	AN3741FAP-AV	IC	1	
IC3204	AD9057BRS	IC	1	
IC3205	TC7SH08FU	IC	1	
IC3207	M62370GP	IC	1	
IC3601	UPD4053BG	IC	1	
IC3602	AN3581S	IC	1	
IC3603	AN3296S	IC	1	
IC3701	TSB13LV11PBW	IC	1	
IC3901	MC14053BF	IC	1	
IC3902	MC14052BF	IC	1	
IC3903	MC14051BF	IC	1	
IC3904	PQ20VB2E	IC	1	
IC4001, 02	UPD4051BG	IC	2	
IC4003	BU4053BCF	IC	1	
IC4004	NJM4558M	IC	1	
IC4201	NJM2112V	IC	1	
IC4210	NJM2115V	IC	1	
IC4301	NJM79L05A	IC	1	
IC4302	NJM4558M	IC	1	
IC4303	UPC78L05J	IC	1	
IC4304, 05	NJM4558M	IC	2	
IC4306	M62409FP	IC	1	
IC4307	NJM4558M	IC	1	
IC4308	M62409FP	IC	1	
IC4309	BU4052BCF	IC	1	
IC4310, 11	NJM4558M	IC	2	
IC4312	NJM4565DD	IC	1	
IC4313, 14	BU4052BCF	IC	2	
IC4315	NJM4558M	IC	1	
IC4316	HA17431PA	IC	1	
IC4501	AK4520A-VF	IC	1	
IC4701	D78011FGC564	IC	1	
IC4702	PST591D	IC	1	
IC4901	MC14052BF	IC	1	
IC6001	M31020VLEC	IC	1	
IC6002	RN5VD29EA	IC	1	
IC6003	MC14013BF	IC	1	
IC6004	TC7W74FU	IC	1	
IC6005	TC7S86FU	IC	1	
IC6006	TC75W54FU	IC	1	
IC7301	TDA9874H	IC	1	
IC7302	PST7043	IC	1	
IC7651	RN5RZ50BA	IC	1	
IC7905	PST7043	IC	1	
IC7906	M34510W2CRE2	IC	1	
IC30001	MC14053BF	IC	1	
IC30002	NJM2903M	IC	1	
IC30003	TCHC4538AF	IC	1	
IC30004	AN3916	IC	1	
IC30005	TCHC4538AF	IC	1	
IC30006	NJM2255D	IC	1	
IC30007	MC14053BF	IC	1	
IC30008	TC9090AF	IC	1	
IC30009	MM1093PFB	IC	1	
IC30010	MB90089WVAS	IC	1	
IC30011	MM1108XFF	IC	1	
IC30012	M24C16-WBN6	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC30013	SABC161RIL16	IC	1	
IC30014	S80743AL	IC	1	
IC30015	M27C2001FBBA	IC	1	
IC30016	SDA5273-2CS	IC	1	
IC30017	M52390FP	IC	1	
IC30018	NJM2513M	IC	1	
IC30019	MC14053BF	IC	1	
⚠ IP1001-09	VSF0015A06	IC PROTECTOR	9	
⚠ IP1011	VSF0015A025	IC PROTECTOR	1	
⚠ IP7601	VSF0015A025	IC PROTECTOR	1	
JK0602	VJJ0242	REMOTE CONTROL JACK	1	
JK0603	VJJ0577	JACK	1	
JK3901, 02	VJS1470	CONNECTOR (FEMALE)	2	
K0702	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0704-06	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	3	
K2001	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K2503, 04	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
K3903	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K7301, 02	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
K7304	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K7904	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K7909-11	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	3	
K30006	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K30010	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
L0701	VLQ0163JR12	COIL 0.12UH	1	
L0705	VLQ0163J5R6	COIL 5.6UH	1	
L0706	VLQEL05S150K	COIL	1	
L1001	ELEKN390KA	COIL 39UH	1	
L2001, 02	ELJPA100KF	COIL 10UH	2	
L2501-04	VLQ0614K331	COIL 330UH	4	
L3001-04	ELJPA100KF	COIL 10UH	4	
L3005	VLQ0426J150	COIL 15UH	1	
L3006-08	ELJPA100KF	COIL 10UH	3	
L3009	VLQ0426J120	COIL 12UH	1	
L3010	VLQ0426J150	COIL 15UH	1	
L3201, 02	ELJPA100KF	COIL 10UH	2	
L3204, 05	ELJPA100KF	COIL 10UH	2	
L3208	ELJPA220KB	COIL 22UH	1	
L3210	ELJPA100KF	COIL 10UH	1	
L3601	VLQ0599J680	COIL 68UH	1	
L3602	VLQ0599J330	COIL 33UH	1	
L3603	VLQ0599J680	COIL 68UH	1	
L3604	VLQ0599J330	COIL 33UH	1	
L3605	VLQ0398	COIL	1	
L3901, 02	VLQ0599J680	COIL 68UH	2	
L4201	VLQ0426J6R8	COIL 6.8UH	1	
L4501, 02	ELJPA100KF	COIL 10UH	2	
L4701, 02	VLQ0599J100	COIL 10UH	2	
L7301	VLQ0599J3R3	COIL 3.3UH	1	
L7302	VLQ0599J1R0	COIL 1UH	1	
L7601	VLQ0599J330	COIL 33UH	1	
L7602	VLQ0599J2R7	COIL 2.7UH	1	
L7605	VLQEL05S330	COIL 33UH	1	
L7611	VLQ0599J100	COIL 10UH	1	
L30001-03	ELJPA330KF	COIL 33UH	3	
L30004	VLQ0163J560	COIL 56UH	1	
L30005	VLQ0163J220	COIL 22UH	1	
L30006-09	VLQ0163J330	COIL 33UH	4	
L30010-14	ELJPA330KF	COIL 33UH	5	
L30015	VLQ0163J220	COIL 22UH	1	
L30017	VLQ0163J220	COIL 22UH	1	
L30018-20	ELJPA330KF	COIL 33UH	3	
L30021	ELJPA150KF	COIL 15UH	1	
L30022, 23	ELJPA330KF	COIL 33UH	2	
L30024	VLQ0163J100	COIL 10UH	1	
L30025	ELJPA330KF	COIL 33UH	1	
L30026	VLQ0163J100	COIL 10UH	1	
L30027	VLQ0163J5R6	COIL 5.6UH	1	
L30028, 29	VLQ0163J330	COIL 33UH	2	
L30030	ELJPA150KF	COIL 15UH	1	
L30031	VLQ0163J8R2	COIL 8.2UH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L30032	VLQ0163J101	COIL 100UH	1	
LB0601-03	VLP0145	COIL	3	
LB2002-04	VLP0364	COIL	3	
LB2201	VLP0085	COIL	1	
LB2202	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
LB2203-06	VLP0085	COIL	4	
LB2501, 02	VLP0083	COIL	2	
LB3001, 02	VLP0364	CHIP INDUCTOR	2	
LB3004	VLP0364	CHIP INDUCTOR	1	
LB3006	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
LB3701-04	VLP0364	CHIP INDUCTOR	4	
LB4901-08	VLP0147	COIL	8	
LB6004	VLP0364	CHIP INDUCTOR	1	
LB7301-04	VLP0150	COIL	4	
LB7601	VLP0125	COIL	1	
LB30001-05	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	5	
LB30006, 07	VLP0196	COIL	2	
LB30008-23	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	16	
LB30024	VLP0147	COIL	1	
LB30025-28	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	4	
LB30029-36	VLP0147	COIL	8	
P1102	VJS1239T	CONNECTOR (FEMALE)	1	
P2502	VJP1931T	CONNECTOR (MALE)	1	
P3701	VJP1229T	CONNECTOR (MALE)	1	
P3701	VJP3125B006	CONNECTOR (MALE) 6P	1	
P3901	VJP1242T	CONNECTOR (MALE)	1	
P4001	VJS3537A020G	CONNECTOR (FEMALE)	1	
P6201	VJP1231T	CONNECTOR (MALE) 4P	1	
P6401	VJS3537A022	CONNECTOR (FEMALE)	1	
P6701	VJS3537A032	CONNECTOR (FEMALE)	1	
P6703	VJS3537A026	CONNECTOR (FEMALE)	1	
P6707	VJP1239T	CONNECTOR (MALE)	1	
P6707	VJS1239T	CONNECTOR (FEMALE)	1	
P7901	VJS3537A019	CONNECTOR (FEMALE)	1	
P7902	VJS3537A017	CONNECTOR (FEMALE)	1	
PK0701	VJR0816E010W	CONNECTOR	1	
PK7301	VJR0777B007W	PIN	1	
PK7302	VJR0777B006W	PIN	1	
PP0701	VJP3589E004B	CONNECTOR (MALE)	1	
PP3401	VJP3573E012	CONNECTOR (MALE)	1	
PP3402, 03	VJP3573E020	CONNECTOR (MALE)	2	
PP3404	VJP3573E008	CONNECTOR (MALE)	1	
PP3501, 02	VJP3573E020	CONNECTOR (MALE)	2	
PP3503	VJP3573E012	CONNECTOR (MALE)	1	
PP3610	VJP3994	CONNECTOR (MALE)	1	
PP3901	VJP3042G009W	CONNECTOR (MALE)	1	
PP4002, 03	VJP3186A018W	CONNECTOR (MALE)	2	
PP6706	VJP3042A020W	CONNECTOR (MALE)	1	
PS0601	VJS3042F009W	CONNECTOR (FEMALE)	1	
PS2501	VJS3042F020W	CONNECTOR (FEMALE)	1	
PS3001	VJS3994	CONNECTOR (FEMALE)	1	
PS3002	VJP3884B060	CONNECTOR (MALE)	1	
PS3901	VJS3573F012	CONNECTOR (FEMALE)	1	
PS3902, 03	VJS3573F020	CONNECTOR (FEMALE)	2	
PS3904	VJS3573F008	CONNECTOR (FEMALE)	1	
PS4301, 02	VJS3186B018	CONNECTOR (FEMALE)	2	
PS30001, 02	VJS3573F020	CONNECTOR (FEMALE)	2	
PS30003	VJS3573F012	CONNECTOR (FEMALE)	1	
Q0701	MSD601-S	TRANSISTOR	1	
Q0702	MSB709-R	TRANSISTOR	1	
Q1001-05	2SD1996	TRANSISTOR	5	
Q1008	2SB956	TRANSISTOR	1	
Q1009	2SB948A	TRANSISTOR	1	
Q1010-12	2SD1996	TRANSISTOR	3	
Q1017	2SD2544O-Q	TRANSISTOR	1	
Q1018	2SD1996	TRANSISTOR	1	
Q1020	2SD601A-R	TRANSISTOR	1	
Q1023	2SD602A-R	TRANSISTOR	1	
Q1024	2SB710	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q1025-27	2SB956	TRANSISTOR	3	
Q1028,29	2SD1996	TRANSISTOR	2	
Q1030	2SD601A-R	TRANSISTOR	1	
Q2201-08	2SD601A-R	TRANSISTOR	8	
Q2501	2SB1073	TRANSISTOR	1	
Q2506,07	2SB1073	TRANSISTOR	2	
Q2509	2SB1073	TRANSISTOR	1	
Q3001	2SD1819	TRANSISTOR	1	
Q3002	2SB1218	TRANSISTOR	1	
Q3003	2SD1819A	TRANSISTOR	1	
Q3004,05	2SD1819	TRANSISTOR	2	
Q3006	2SC3930	TRANSISTOR	1	
Q3007,08	2SD1819	TRANSISTOR	2	
Q3201	2SB1218A-R	TRANSISTOR	1	
Q3601	2SD601A-R	TRANSISTOR	1	
Q3602	MSB709-R	TRANSISTOR	1	
Q3901	2SD1328	TRANSISTOR	1	
Q3902	2SB709A	TRANSISTOR	1	
Q3903,04	2SD601A	TRANSISTOR	2	
Q3905	2SB709A	TRANSISTOR	1	
Q3907-09	2SD601A	TRANSISTOR	3	
Q4001	2SK170BL	TRANSISTOR	1	
Q4002	2SB709	TRANSISTOR	1	
Q4003	2SD1992	TRANSISTOR	1	
Q4004	2SD601A-R	TRANSISTOR	1	
Q4005	2SB1320A	TRANSISTOR	1	
Q4301	2SD1468T93	TRANSISTOR	1	
Q4302	MSB709-R	TRANSISTOR	1	
Q4303-10	2SD601A	TRANSISTOR	8	
Q4311,12	XN4501	TRANSISTOR-RESISTOR	2	
Q4313-15	2SD601A	TRANSISTOR	3	
Q4701,02	2SD601A-R	TRANSISTOR	2	
Q6001	2SB970X	TRANSISTOR	1	
Q7601	2SD601A-R	TRANSISTOR	1	
Q7604,05	2SD1328-S	TRANSISTOR	2	
Q7606	2SB709A	TRANSISTOR	1	
Q30001	MSD601-R	TRANSISTOR	1	
Q30002	MSB709-R	TRANSISTOR	1	
Q30003,04	2SB1218	TRANSISTOR	2	
Q30005,06	2SC3930	TRANSISTOR	2	
Q30007,08	MSB709-R	TRANSISTOR	2	
Q30009	2SC3930	TRANSISTOR	1	
Q30010	MSC2295-B	TRANSISTOR	1	
Q30011	2SB1218	TRANSISTOR	1	
Q30012	MSC2295-B	TRANSISTOR	1	
Q30013,14	2SB1218	TRANSISTOR	2	
Q30015	2SD1819	TRANSISTOR	1	
Q30016	MSB709-R	TRANSISTOR	1	
Q30017	2SD1819	TRANSISTOR	1	
Q30018	MSB709-R	TRANSISTOR	1	
Q30019	2SD1819	TRANSISTOR	1	
Q30020	2SB1218	TRANSISTOR	1	
Q30021,22	2SD1819	TRANSISTOR	2	
Q30023	2SB1218	TRANSISTOR	1	
Q30024-27	2SD1819	TRANSISTOR	4	
Q30028	MSB709-R	TRANSISTOR	1	
Q30030	MSD601-R	TRANSISTOR	1	
Q30031,32	2SB1218	TRANSISTOR	2	
Q30033	2SD1819	TRANSISTOR	1	
Q30034,35	2SB1218	TRANSISTOR	2	
Q30036	2SD1819	TRANSISTOR	1	
Q30037	MSB709-R	TRANSISTOR	1	
Q30038	2SD1819	TRANSISTOR	1	
Q30039	2SB1218	TRANSISTOR	1	
Q30040	2SD1819	TRANSISTOR	1	
Q30042	2SD1819	TRANSISTOR	1	
Q30043	2SB1218	TRANSISTOR	1	
Q30044	MSD601-R	TRANSISTOR	1	
Q30045	2SB1218	TRANSISTOR	1	
Q30046	MSD601-R	TRANSISTOR	1	
Q30047	MSB709-R	TRANSISTOR	1	
Q30048	2SD1819	TRANSISTOR	1	
Q30049	2SB1218	TRANSISTOR	1	
QR1001	MUN2213	TRANSISTOR-RESISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR1003	UN221F	TRANSISTOR-RESISTOR	1	
QR1005	MUN2113	TRANSISTOR-RESISTOR	1	
QR1008	MUN2211	TRANSISTOR-RESISTOR	1	
QR1009	MUN2213	TRANSISTOR-RESISTOR	1	
QR1011	MUN2213	TRANSISTOR-RESISTOR	1	
QR1012	UN211D	TRANSISTOR-RESISTOR	1	
QR2001	UN5113	TRANSISTOR-RESISTOR	1	
QR2002,03	UN5213	TRANSISTOR-RESISTOR	2	
QR2201-06	MUN2213	TRANSISTOR-RESISTOR	6	
QR2207,08	MUN2212	TRANSISTOR-RESISTOR	2	
QR2209-11	MUN2211	TRANSISTOR-RESISTOR	3	
QR2212	MUN2213	TRANSISTOR-RESISTOR	1	
QR2213	MUN2211	TRANSISTOR-RESISTOR	1	
QR2214	MUN2213	TRANSISTOR-RESISTOR	1	
QR2215	MUN2211	TRANSISTOR-RESISTOR	1	
QR2216-18	MUN2213	TRANSISTOR-RESISTOR	3	
QR2220-22	MUN2213	TRANSISTOR-RESISTOR	3	
QR2503	UN2215	TRANSISTOR-RESISTOR	1	
QR2508	UN2115	TRANSISTOR-RESISTOR	1	
QR3601-03	MUN2213	TRANSISTOR-RESISTOR	3	
QR3604,05	UN221L	TRANSITOR-RESISTOR	2	
QR3606	MUN2212	TRANSISTOR-RESISTOR	1	
QR3901	MUN2211	TRANSISTOR-RESISTOR	1	
QR3902	MUN2111	TRANSISTOR-RESISTOR	1	
QR3903	MUN2211	TRANSISTOR-RESISTOR	1	
QR3904	MUN2213	TRANSISTOR-RESISTOR	1	
QR4301	UN2119	TRANSISTOR-RESISTOR	1	
QR4302	MUN2212	TRANSISTOR-RESISTOR	1	
QR4303	MUN2213	TRANSISTOR-RESISTOR	1	
QR4701-03	MUN2213	TRANSISTOR-RESISTOR	3	
QR4704	MUN2211	TRANSISTOR-RESISTOR	1	
QR4706	MUN2112	TRANSISTOR-RESISTOR	1	
QR6001	UN5213	TRANSISTOR-RESISTOR	1	
QR7601	MUN2213	TRANSISTOR-RESISTOR	1	
QR30001	MUN2213	TRANSISTOR-RESISTOR	1	
QR30003	UN221L	TRANSITOR-RESISTOR	1	
QR30004	UN5116	TRANSISTOR	1	
QR30005	MUN2213	TRANSISTOR-RESISTOR	1	
QR30006	MUN2111	TRANSISTOR-RESISTOR	1	
R0703	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R0704	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R0709	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1	
R0713	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R0714	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715	ERJ3GEYJ432	M.RESISTOR CH 1/16W 4.3K	1	
R0716	VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R0718	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R0719	ERJ6GEYG752	M.RESISTOR CH 1/10W 7.5K	1	
R0720	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R0722	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0723	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R0724	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0725	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R0726	ERJ3GEYG561	M.RESISTOR CH 1/16W 560	1	
R0727	ERJ3GEYG132	M.RESISTOR CH 1/16W 1.3K	1	
R0728	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R0729	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R0732	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R0783	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1001	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R1002	ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R1004	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R1005,06	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	2	
R1007	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1008	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R1009	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R1012	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1013,14	ERDS2TJ821	C.RESISTOR 1/4W 820	2	
R1015	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1016	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R1018	ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R1019	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R1021	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1022	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1023	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R1025	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1026	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R1027	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1028	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R1029	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R1030	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R1031	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R1032,33	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	2	
R1034	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R1036	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R1039	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R1040	ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R1041	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R1042	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R1043	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1044	ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R1045,46	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R1049	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1050,51	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	2	
R1052	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R2001	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2002,03	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R2006-21	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	16	
R2022-27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	6	
R2028	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R2029-31	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R2032	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R2033	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R2034	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R2035	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R2036	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R2038	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R2039	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2040	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R2042	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2045	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2047	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R2048	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2049	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R2050	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2052	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2055-60	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	6	
R2061,62	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R2063,64	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R2065	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2068	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2073	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2074	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R2076	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R2077	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R2079	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R2080	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R2081	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R2082	ERJ3RBD183	M.RESISTOR CH 3W 18K	1	
R2084	ERJ3RBD333	M.RESISTOR CH 3W 33K	1	
R2085,86	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	2	
R2087,88	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R2090	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2092	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R2099-02	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
R2104-06	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
R2111	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R2112	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R2113	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R2115	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2118,19	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R2201	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R2202	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2203	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2204-06	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R2207	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2209	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R2211	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2213	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2215	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
R2217-19	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R2220-23	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	4	
R2224-26	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R2227	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2228	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2229	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2230	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2231	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R2232	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2233	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R2234	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2235	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
R2236	ERJ6GEYJ106	M.RESISTOR CH 1/10W 10M	1	
R2237	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R2238-40	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	
R2241	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R2242	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R2243	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R2244	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R2245	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2246	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R2247	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2248	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R2249	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2250,51	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R2252-54	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	3	
R2255	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2256,57	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R2258	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R2261	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2262	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1	
R2263	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2264	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R2265,66	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R2267	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R2268	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2269-75	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	7	
R2280-84	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	5	
R2285	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2286	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R2287	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R2288	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R2289	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R2290	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R2291	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R2292-95	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	4	
R2296,97	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R2298,99	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	2	
R2301	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2302	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R2303	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2304	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2305	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2306-12	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	7	
R2313	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2314	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R2315	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R2316	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2317	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R2318	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R2319	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2320	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R2321	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R2322	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2323	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R2324	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R2325	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R2326	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R2327	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2328, 29	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
R2330	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R2331	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R2504	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R2505	ERDS2TJ681	C. RESISTOR 1/4W 680	1	
R2513	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R2514	ERDS2TJ681	C. RESISTOR 1/4W 680	1	
R2523	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R2524	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R2525-27	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	3	
R2528	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R2534, 35	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R2537	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R2538, 39	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	2	
R2540, 41	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R2543	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R2544	ERJ6GEYG474	M. RESISTOR CH 1/10W 470K	1	
R2545	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R2546	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R2547	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R2548	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R2549	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R2550	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R2551	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R2552	ERJ6GEYG474	M. RESISTOR CH 1/10W 470K	1	
R2553	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R2554	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R2555	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R2556	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R3001	ERJ3RBD104	M. RESISTOR CH 3W 100K	1	
R3003	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R3004	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3005, 06	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R3009	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R3010	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R3011, 12	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	2	
R3013	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R3014	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R3016	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R3017	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R3018	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R3019	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R3020	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R3021	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R3022	ERJ3GEYJ121	M. RESISTOR CH 1/16W 120	1	
R3023	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R3024	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R3026	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R3027	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R3028	ERJ3GEYJ183	M. RESISTOR CH 1/16W 18K	1	
R3034	ERJ3GEYG822	M. RESISTOR CH 1/16W 8.2K	1	
R3035	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R3036	ERJ3GEYG822	M. RESISTOR CH 1/16W 8.2K	1	
R3037	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R3038	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3039	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R3041	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R3042	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R3043	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R3044	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R3046	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R3047	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R3048, 49	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	2	
R3050, 51	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	2	
R3052	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R3053	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3054	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R3057, 58	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R3059	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3060, 61	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	2	
R3063	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R3064	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3065	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R3066	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3067, 68	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3069, 70	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R3072	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R3073	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R3074	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3075	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R3077	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3079	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3080-83	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	4	
R3084	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	1	
R3085	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R3086	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3088	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R3089, 90	ERJ3GEYJ392	M. RESISTOR CH 1/16W 3.9K	2	
R3091	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R3092	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R3094	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R3095	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3097	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R3098, 99	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	2	
R3100	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R3101	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3102	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R3117	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R3120-22	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	3	
R3123	ERJ3GEYJ564	M. RESISTOR CH 1/16W 560K	1	
R3128	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R3129	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R3130	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R3131	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R3132	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R3133	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R3201	ERJ2GEJ102	M. RESISTOR CH 2W 1K	1	
R3202	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3203	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R3204	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R3205	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R3206, 07	ERJ3GEYJ121	M. RESISTOR CH 1/16W 120	2	
R3208	ERJ3GEYG822	M. RESISTOR CH 1/16W 8.2K	1	
R3209	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R3210	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R3211	ERJ3GEYJ680	M. RESISTOR CH 1/16W 68	1	
R3212	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3213	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R3214	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R3215	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3217	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R3218	ERJ3GEYJ392	M. RESISTOR CH 1/16W 3.9K	1	
R3219	ERJ3RBD222	M. RESISTOR CH 3W 2.2K	1	
R3220	ERJ3GEYJ564	M. RESISTOR CH 1/16W 560K	1	
R3221	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R3222	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R3223	ERJ3RBD222	M. RESISTOR CH 3W 2.2K	1	
R3224	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R3225	ERJ3GEYJ392	M. RESISTOR CH 1/16W 3.9K	1	
R3226	ERJ3GEYJ224	M. RESISTOR CH 1/16W 220K	1	
R3227	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R3228	ERJ3GEYJ392	M. RESISTOR CH 1/16W 3.9K	1	
R3229	ERJ3GEYJ224	M. RESISTOR CH 1/16W 220K	1	
R3230	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3232	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R3233	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R3234	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R3235-37	ERJ3GEYJ392	M. RESISTOR CH 1/16W 3.9K	3	
R3238	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R3239	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R3240, 41	ERJ3GEYJ392	M. RESISTOR CH 1/16W 3.9K	2	
R3242	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3243	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R3245	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R3248	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3249	ERJ3GEYJ683	M. RESISTOR CH 1/16W 68K	1	
R3256	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3257	ERJ3GEYJ124	M. RESISTOR CH 1/16W 120K	1	
R3258-66	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	9	
R3267	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3268	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R3269-72	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	4	
R3301-07	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	7	
R3308	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R3309, 10	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R3312	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3601	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3602	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1	
R3603, 04	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
R3605	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3606	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3607	ERJ6GEYJ224	M. RESISTOR CH 1/10W 220K	1	
R3608	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3609	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R3610	ERJ6GEYG681	M. RESISTOR CH 1/10W 680	1	
R3611	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3612	ERJ6GEYG474	M. RESISTOR CH 1/10W 470K	1	
R3613	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3614, 15	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3617	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3618	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R3620	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R3621	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3622	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3623	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3624	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3625	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3626	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3627	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3628	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R3629, 30	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3631	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R3632	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3633	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3634	ERJ6GEYG683	M. RESISTOR CH 1/10W 68K	1	
R3635	ERJ6GEYJ684	M. RESISTOR CH 1/10W 680K	1	
R3636	ERJ6GEYG753	M. RESISTOR CH 1/10W 75	1	
R3637	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R3638	ERJ6GEYG824	M. RESISTOR CH 1/10W 820K	1	
R3640	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1	
R3641	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3643	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R3701	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R3702	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3703	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R3709	ERJ3RBD272	M. RESISTOR CH 3W 2.7K	1	
R3710	ERJ3RBD332	M. RESISTOR CH 3W 3.3K	1	
R3711	ERJ3GEYJ394	M. RESISTOR CH 1/16W 390K	1	
R3715-18	ERJ3RED560	M. RESISTOR CH 3W 56	4	
R3719	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R3720	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R3721-25	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	5	
R3728-33	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	6	
R3735	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R3736	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R3737	ERJ3GEYJ270	M. RESISTOR CH 1/16W 27	1	
R3739, 40	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R3901-09	ERJ6GEYG750	M. RESISTOR CH 1/10W 75	9	
R3910	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R3911	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R3912	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R3913	ERJ6GEYG121	M. RESISTOR CH 1/10W 120	1	
R3914	ERJ6GEYJ111	M. RESISTOR CH 1/10W 110	1	
R3915	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R3916	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R3917	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R3918	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R3919	ERJ6GEYJ111	M. RESISTOR CH 1/10W 110	1	
R3920	ERJ6GEYG121	M. RESISTOR CH 1/10W 120	1	
R3921-23	ERJ6GEYG750	M. RESISTOR CH 1/10W 75	3	
R3924	ERDS2TJ561	C. RESISTOR 1/4W 560	1	
R3925	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3926	ERJ6GEYG750	M. RESISTOR CH 1/10W 75	1	
R3927	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	
R3928	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3931	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R3932, 33	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
R3934	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	1	
R3935	ERJ6GEYG683	M. RESISTOR CH 1/10W 68K	1	
R3936, 37	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	2	
R4001	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R4002-04	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	3	
R4005	ERJ6GEYG683	M. RESISTOR CH 1/10W 68K	1	
R4006	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R4007	ERJ6GEYG683	M. RESISTOR CH 1/10W 68K	1	
R4008	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R4009	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R4010	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R4011	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R4012	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R4014	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R4015	ERJ6GEYJ113	M. RESISTOR CH 1/10W 11K	1	
R4016	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R4017	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R4018	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R4019	ERJ6RBD471	M. RESISTOR CH 1/10W 470	1	
R4020	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	1	
R4021, 22	ERJ6RBD202	M. RESISTOR CH 1/10W 2K	2	
R4023	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	1	
R4024	ERJ6RBD201	M. RESISTOR CH 1/10W 200	1	
R4025-27	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	3	
R4203, 04	ERJ3RBD103	M. RESISTOR CH 3W 10K	2	
R4205, 06	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R4207-10	ERJ3RBD103	M. RESISTOR CH 3W 10K	4	
R4213, 14	ERJ3RBD103	M. RESISTOR CH 3W 10K	2	
R4215, 16	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R4217, 18	ERJ3RBD103	M. RESISTOR CH 3W 10K	2	
R4219-22	ERJ3RBD472	M. RESISTOR CH 1/10W 4.7K	4	
R4223, 24	ERJ3RBD103	M. RESISTOR CH 3W 10K	2	
R4225, 26	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R4227, 28	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R4229-32	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	4	
R4233	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R4301	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R4302	ERJ6RBD391	M. RESISTOR CH 1/10W 390	1	
R4303	ERJ6RBD472	M. RESISTOR CH 1/10W 4.7K	1	
R4305	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R4306, 07	ERJ6RBD183	M. RESISTOR CH 1/10W 18K	2	
R4308	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R4309	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R4310	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R4311	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R4312	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R4313	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R4314	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R4315	ERJ6RBD123	M. RESISTOR CH 1/10W 12K	1	
R4316	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R4317	ERJ6RBD123	M. RESISTOR CH 1/10W 12K	1	
R4318	ERJ6RED204	M. RESISTOR CH 1/10W 200K	1	
R4319	ERJ6RBD104	M. RESISTOR CH 1/10W 100K	1	
R4320	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R4321	ERJ6RBD104	M. RESISTOR CH 1/10W 100K	1	
R4322	ERJ6RED204	M. RESISTOR CH 1/10W 200K	1	
R4323	ERJ6RBD273	M. RESISTOR CH 1/10W 27K	1	
R4324	ERJ6RBD751	M. RESISTOR CH 1/10W 750	1	
R4325	ERJ6RED204	M. RESISTOR CH 1/10W 200K	1	
R4326	ERJ6RBD112	M. RESISTOR CH 1/10W 1.1K	1	
R4327	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R4328	ERJ6RED204	M. RESISTOR CH 1/10W 200K	1	
R4329	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R4330	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R4331	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R4332	ERJ6RBD223	M. RESISTOR CH 1/10W 22K	1	
R4333	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R4334	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R4335	ERJ6RBD223	M. RESISTOR CH 1/10W 22K	1	
R4336	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R4337	ERJ6RBD273	M. RESISTOR CH 1/10W 27K	1	
R4338	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4339	ERJ6RBD363	M. RESISTOR CH 1/10W 36K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4340	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4342	ERJ6RBD683	M.RESISTOR CH 1/10W 68K	1	
R4343	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1	
R4344	ERJ6RBD683	M.RESISTOR CH 1/10W 68K	1	
R4345	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1	
R4347	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4348,49	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	2	
R4350	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R4351	ERJ6RBD392	M.RESISTOR CH 1/10W 3.9K	1	
R4352	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4353	ERJ6RBD392	M.RESISTOR CH 1/10W 3.9K	1	
R4354,55	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	2	
R4356	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4357	ERJ6RBD363	M.RESISTOR CH 1/10W 36K	1	
R4358	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4359	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4360	ERJ6RBD363	M.RESISTOR CH 1/10W 36K	1	
R4361	ERDAS3G680	M.RESISTOR 3W 68	1	
R4362	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4363	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4364	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4365	ERDAS3G680	M.RESISTOR 3W 68	1	
R4366	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4367	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4368	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4369	ERJ3RBD513	M.RESISTOR CH 3W 51K	1	
R4370	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R4371	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4372	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R4373	ERJ3RBD513	M.RESISTOR CH 3W 51K	1	
R4374	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4375	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4376	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4377	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4379	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R4380	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4381	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R4382	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4384	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4385	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4386	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4387	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R4388	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4389	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R4390	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4391	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4392	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4393	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4394	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R4396	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4397	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4398	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4401-03	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	3	
R4405-07	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	3	
R4701,02	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4703	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4704	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4705	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4706-09	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	4	
R4710	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R4712-18	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	7	
R4719	ERJ6GEYG560	M.RESISTOR CH 1/10W 56	1	
R4721	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R4722	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4723	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R4724	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4726	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4727	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4728,29	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	2	
R4903,04	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R4907,08	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R4911,12	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R6001	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6003	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6006	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6008	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R6009	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6010	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R6011	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R6012	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R6014	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R6015	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R6016-18	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
R6019	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6024	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R6025-28	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R6029	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R6034,35	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R6036-38	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	3	
R6039	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6042	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R6043	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R6044	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R6045	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R6046	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6047	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R6048,49	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	2	
R6050	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R6051	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R6052	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6053	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6054,55	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	2	
R6056,57	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R6058-61	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R6063-65	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R6066	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R6067	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R6068,69	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2	
R6070	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R6071	ERJ3GEYG223	M.RESISTOR CH 1/16W 22K	1	
R6072	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6073	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6074,75	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R6080	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R6082	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6084,85	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R6087	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6089-91	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R6092	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R6093	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R6095	ERJ3GEYG223	M.RESISTOR CH 1/16W 22K	1	
R6096	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R6097	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6098	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6099	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6100	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R6101	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R6102,03	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R6104	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6105	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R6107	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6108	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7305,06	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R7316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7318	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R7324	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7325	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7326	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7327	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7328,29	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R7601,02	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R7603	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R7604	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R7605,06	ERG2SJ331	M.RESISTOR 2W 330	2	
R7607,08	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	2	
R7609,10	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	2	
R7611	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R7612	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R7613,14	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7622	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R7624	ERJ6GEYG182	M. RESISTOR CH 1/10W 1.8K	1	
R7651	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R7653	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R7936	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1	
R7937	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R7938	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R7939-41	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	3	
R7942, 43	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R7944	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R7945	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R7946	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R7947	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R7948	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R7950	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R7953	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R7954	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R30001	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R30002	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R30003	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R30004	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R30005	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R30006	ERJ3GEYG114	M. RESISTOR CH 1/16W 110K	1	
R30008	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R30009	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R30010	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R30011	ERJ3GEYJ123	M. RESISTOR CH 1/16W 12K	1	
R30012	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R30013	ERJ6GEYG132	M. RESISTOR CH 1/10W 1.3K	1	
R30014	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R30017	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R30018	ERJ3GEYJ181	M. RESISTOR CH 1/16W 180	1	
R30019	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R30020	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R30021	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R30022	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R30023	ERJ3GEYJ112	M. RESISTOR CH 1/16W 1.1K	1	
R30024	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R30025	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R30026	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R30027	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R30028	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R30029	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R30030	ERJ3GEYJ241	M. RESISTOR CH 1/16W 240	1	
R30031	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R30032	ERJ3GEYJ112	M. RESISTOR CH 1/16W 1.1K	1	
R30033	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R30034	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R30035, 36	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	2	
R30037	ERJ3GEYJ112	M. RESISTOR CH 1/16W 1.1K	1	
R30038	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R30039	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R30040	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R30041	ERJ6GEYG121	M. RESISTOR CH 1/10W 120	1	
R30042	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R30043	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R30044	ERJ3GEYG822	M. RESISTOR CH 1/16W 8.2K	1	
R30045	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	1	
R30046, 47	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R30048	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R30049	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R30051	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R30052	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R30053	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R30054	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R30055	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R30056	ERJ3RBD153	M. RESISTOR CH 3W 15K	1	
R30057	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R30058	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R30061	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R30064	ERJ6GEYG432	M. RESISTOR CH 1/10W 4.3K	1	
R30065	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R30066, 67	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R30068	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R30069	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R30070-72	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	3	
R30073	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R30074	VLF1315A102	FILTER	1	
R30075, 76	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	2	
R30077, 78	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	2	
R30079	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R30080	ERJ3GEYJ334	M. RESISTOR CH 1/16W 330K	1	
R30081	ERJ6GEYG823	M. RESISTOR CH 1/10W 82K	1	
R30082	ERJ6RBD104	M. RESISTOR CH 1/10W 100K	1	
R30083	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R30086	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R30087	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R30088	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R30089	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R30090	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R30091, 92	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	2	
R30093	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R30094	ERJ6GEYG682	M. REISITOR CH 1/10W 6.8K	1	
R30095	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R30097	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R30098	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R30099	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R30100	ERJ3GEYJ224	M. RESISTOR CH 1/16W 220K	1	
R30101	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R30102	ERJ6GEYJ225	M. RESISTOR CH 1/10W 2.2M	1	
R30103	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R30104	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R30105-07	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	3	
R30108	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R30111	VLF1315A102	FILTER	1	
R30114, 15	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R30119	VLF1315A102	FILTER	1	
R30120	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R30123, 24	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2	
R30126	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R30127, 28	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	2	
R30131-34	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	4	
R30135, 36	VLP0147	COIL	2	
R30139, 40	VLP0147	COIL	2	
R30141	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R30142	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R30143, 44	VLF1315A102	FILTER	2	
R30145	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R30146	VLP0147	COIL	1	
R30148	VLF1315A102	FILTER	1	
R30149	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R30150, 51	ERJ6GEYG682	M. REISITOR CH 1/10W 6.8K	2	
R30152	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R30153	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R30154	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R30155	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R30156	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R30157	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R30158	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R30159	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R30160, 61	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R30166	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R30167	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R30168	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R30169	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R30170	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R30171	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R30172	ERJ6GEYG911	M. RESISTOR CH 1/10W 910	1	
R30173	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R30174	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R30175	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R30176	ERJ3GEYJ111	M. RESISTOR CH 1/16W 36K	1	
R30177	ERJ3GEYJ121	M. RESISTOR CH 1/16W 120	1	
R30178	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R30179	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R30180	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R30181	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R30182, 83	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	2	
R30184	ERJ3GEYJ153	M. RESISTOR CH 1/16W 15K	1	
R30185	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R30186	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30187	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R30188,89	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2	
R30190	VLF1315A102	FILTER	1	
R30195	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R30196	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R30197	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R30198	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R30199	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R30200	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30201	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R30202	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30203	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R30204	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1	
R30205	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R30206	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R30207	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R30208	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30211	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R30212	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R30213	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R30216	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R30217,18	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R30219	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R30220	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R30222	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R30223	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R30224	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R30225	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R30226	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30227	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R30228	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R30229	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R30230	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30231	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R30232	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R30233	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R30234	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R30235	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R30236	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	1	
R30237	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R30238	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R30239,40	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R30241,42	VLF1315A102	FILTER	2	
R30243	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R30244	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R30245	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R30246	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R30247	VLF1315A102	FILTER	1	
R30248,49	VLP0147	COIL	2	
R30250	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R30251	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R30252	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30253	ERJ6GEYJ112	M.RESISTOR CH 1/10W 1.1K	1	
R30254	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
S3901	VSS0513	SWITCH	1	
T0703	EQV5EC071A	TRANSFORMER	1	
T0704	EQV5EC072A	TRANSFORMER	1	
T0711	EQS5EC032A	TRANSFORMER	1	
TP2201	VJR0098	TEST POINT	1	
TP3002	VJR0098	TEST POINT	1	
TP3021	VJR0098	TEST POINT	1	
TP3030-32	VJR0098	TEST POINT	3	
TP3701,02	VJR0098	TEST POINT	2	
TP3901	VJR0098	TEST POINT	1	
TP30001-0	VJR0108	TEST POINT	5	
TP30007-1	VJR0108	TEST POINT	8	
TU7601	VEK8433	RF BOARD	1	
VC30001	ECRJA020E11	TRIMMER 20P	1	
VC30002,0	ECRJA050M11	E.CAPACITOR 10U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
VR0701	EVNCBAA00B24	V.RESISTOR 20K	1	
VR30001	EVM7JGA00B15	V.RESISTOR 100K	1	
VR30002	EVMEGSA00B24	V.RESISTOR 20K	1	
VR30003,0	EVM7JGA00B54	V.RESISTOR 50K	2	
W101,02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
W102	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W103	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W103	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W104	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W104	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W105	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
W105,06	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W107	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
W108	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W109	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W111	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W112	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W113	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
W114	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W115,16	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
X0701	VLF1416	FILTER	1	
X0702	VLF1290	FILTER	1	
X0703	EFCS5R5MW5	FILTER	1	
X0704	VLF1313	FILTER	1	AG-DV2700B
X0704	VLF1368	FILTER	1	AG-DV2700E
X2001	VSX0847	CRYSTAL OSCILLATOR	1	
X2002	VSX0872	CRYSTAL OSCILLATOR	1	
X2201	VSX0830	CRYSTAL OSCILLATOR	1	
X2202	VSX0860	CRYSTAL OSCILLATOR	1	
X2203	EFOEC7374A4	CRYSTAL OSCILLATOR	1	
X3001	VSX0848	CRYSTAL OSCILLATOR	1	
X3003	VSX0846	CRYSTAL OSCILLATOR	1	
X3004	VSX0932	CRYSTAL OSCILLATOR	1	
X4701	VSX0934	CRYSTAL OSCILLATOR	1	
X6001	VSX0847	CRYSTAL OSCILLATOR	1	
X7302	VSX0953	CRYSTAL OSCILLATOR	1	
X7902	EFOEC4004A4	CRYSTAL OSCILLATOR	1	
X30001	VSX1030	CRYSTAL OSCILLATOR	1	
X30002	VSX0574	CRYSTAL OSCILLATOR	1	
X30003	VSX0830	CRYSTAL OSCILLATOR	1	
X30004	VSX0966	CRYSTAL OSCILLATOR	1	
X30005	VSX0942	CRYSTAL OSCILLATOR	1	
ZA3001-03	XTV3+6J	SCREW	3	
ZA3004	VSC4689	SHIELD CASE (B)	1	
ZA3005	VSC4690	SHIELD CASE (T)	1	
ZA3901	VEJ1819	IN/OUT JACK	1	
ZA3902-05	XTV3+8GFZ	SCREW	4	
ZA30001-0	XTV3+6J	SCREW	3	
ZA30004	VSC4689	SHIELD CASE (B)	1	
ZA30005	VSC4690	SHIELD CASE (T)	1	
ZB0601	VJH1041	REAR JACK BOARD	1	
ZB2501	VJF0442	MINI CLAMPER	1	
ZB4001,02	VMP4985	CARD CORNER HOLDER	2	
ZB6701,02	VMP4985	CARD CORNER HOLDER	2	
		MISCELLANEOUS		
	VEE0C99	CABLE	1	P1102-P1001
	VSC4753	SHIELD CASE (LOWER)	1	
	VSC4752	SHIELD CASE (MIDDLE)	1	
	VWJ1195	FLAT CARD CABLE	1	P7502-P7901
	VWJ1196	FLAT CARD CABLE	1	P7501-P7902
	VWJ1197	FLAT CARD CABLE	1	PS4851-P6081
	VWJ1248	FLAT CARD CABLE	1	P4801-P4001

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP05351A	HEAD AMP C.B.A.	1	(RTL)
C5001-04	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	4	
C5007	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C5010	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C5013	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C5014	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C5015	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C5016	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C5017	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C5018	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C5019	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C5020,21	ECST1AY106Z	T. CAPACITOR CH 10V 10U	2	
C5022	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C5023,24	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C5025	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	1	
C5026	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C5027	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C5028	ECUX1H122KBV	C. CAPACITOR CH 50V 1200P	1	
C5029	ECUX1A105ZFV	C. CAPACITOR CH 10V 1U	1	
C5030	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C5031	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C5032	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C5033	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C5034	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C5035	ECST1AY106Z	T. CAPACITOR CH 10V 10U	1	
C5036,37	ECST0JY106Z	T. CAPACITOR CH6.3V 10U	2	
C5038	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C5047	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C5051	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
FP5001	VJS3319B008	CONNECTOR (FEMALE)	1	
FP5002	VJS3251	CONNECTOR (FEMALE)	1	
IC5001	AN3731FHQ	IC	1	
L5002,03	VLQ0163K220	COIL 22UH	2	
L5005-07	ELJPA100KF	COIL 10UH	3	
Q5002,03	2SC3937	TRANSISTOR	2	
Q5005,06	2SD1938F	TRANSISTOR	2	
R5002	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R5003	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R5004	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R5005	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R5010	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R5012	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R5013	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R5014,15	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	2	
R5016,17	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R5018	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R5019	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R5020	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R5021	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R5024	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R5025	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R5026	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R5028	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R5029-32	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R5040,41	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
		MISCELLANEOUS		
	VSC4698	SHIELD CASE (A)	1	
■	VEP02557B	MECHANISM DRIVE C.B.A.	1	(RTL)
C2701,02	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C2703	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2704	EEVHB1H2R2	E. CAPACITOR 50V 2.2U	1	
C2705	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1	
C2706	ECUX1C474KBN	C. CAPACITOR CH 16V 0.47U	1	
C2707	ECUX1A104KBV	C. CAPACITOR CH 10V 0.1U	1	
C2708	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C2709	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C2710,11	EEVHB1H2R2	E. CAPACITOR 50V 2.2U	2	
C2712,13	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	2	
C2714,15	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C2716-18	ECUX1C333KBV	C. CAPACITOR CH 16V 0.033U	3	
C2719	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C2720-22	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	3	
C2723	EEVHB1A330	E. CAPACITOR 10V 33U	1	
C2724	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C2725	EEVHB1H2R2	E. CAPACITOR 50V 2.2U	1	
C2726	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1	
C2727	ECUX1C474KBN	C. CAPACITOR CH 16V 0.47U	1	
C2728	ECUX1A104KBV	C. CAPACITOR CH 10V 0.1U	1	
C2729	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C2730	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C2731,32	EEVHB1H2R2	E. CAPACITOR 50V 2.2U	2	
C2733,34	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	2	
C2735,36	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C2737-39	ECUX1C333KBV	C. CAPACITOR CH 16V 0.033U	3	
C2740	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C2741-43	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	3	
C2745	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C2747	ECUX1C474ZFN	C. CAPACITOR CH 16V 0.47U	1	
C2748	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C2749	ECUX1H332KBV	C. CAPACITOR CH 50V 3300P	1	
C2751	ECUX1C474ZFN	C. CAPACITOR CH 16V 0.47U	1	
C2752	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C2753	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C2754	ECUX1H471JCV	C. CAPACITOR CH 50V 470P	1	
C2755	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C2757	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C2758,59	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C2760	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C2762	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C2763	ECUX1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C2764	ECUX0J225KBN	C. CAPACITOR CH6.3V 2.2U	1	
C2766	ECUX1E223KBV	C. CAPACITOR CH 25V 0.023U	1	
C2767	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1	
C2768	EEVHB1E4R7	E. CAPACITOR 25V 4.7U	1	
C2769-71	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	3	
C2772-77	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	6	
C2778-80	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	3	
C2781,82	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2	
C2783	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C2784-87	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	4	
C2788	EEVHB1C470	E. CAPACITOR 16V 47U	1	
C2789,90	ECUX1H562KBV	C. CAPACITOR CH 50V 5600P	2	
C2791	EEVHB1C470	E. CAPACITOR 16V 47U	1	
C2792	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C2793	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C2794	ECUX0J225KBN	C. CAPACITOR CH6.3V 2.2U	1	
C2795	ECUX1H332KBV	C. CAPACITOR CH 50V 3300P	1	
C2796	ECUX1H562KBV	C. CAPACITOR CH 50V 5600P	1	
C2797	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C2798	ECUX1H562KBV	C. CAPACITOR CH 50V 5600P	1	
C2799,00	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	2	
C2801,02	EEVHP1HR47	E. CAPACITOR 50V 47U	2	
C2803	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C2807,08	EEVHB1C100	E. CAPACITOR 16V 10U	2	
C2809	EEVHB0J330	E. CAPACITOR 6.3V 33U	1	
C2810	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C2811	EEVHB0J330	E. CAPACITOR 6.3V 33U	1	
C6301-06	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	6	
C6307	EEVHB1C470	E. CAPACITOR 16V 47U	1	
C6308-13	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	6	
C6314-16	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	3	
C6317	EEVHB1C470	E. CAPACITOR 16V 47U	1	
C6318-27	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	10	
C6328	EEVHB1C470	E. CAPACITOR 16V 47U	1	
C6501	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C6502	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C6504	EEVHB1C470	E. CAPACITOR 16V 47U	1	
C6505	ECUX1C224ZFV	C. CAPACITOR CH 16V 0.22U	1	
C6506	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6507	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C6509	EEVHB1C470	E. CAPACITOR 16V 47U	1	
C6510	ECUX1C224ZFV	C. CAPACITOR CH 16V 0.22U	1	
C6511,12	EEVHB1H3R3	E. CAPACITOR 50V 3.3U	2	
C6513	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C6515	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6516-18	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	3	
C6519	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6520	EEVHB1H3R3	E. CAPACITOR 50V 3.3U	1	
C6522	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C6523-26	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C6527	ECUX1A105KBN	C. CAPACITOR CH 10V 1U	1	
C6529	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C6530	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6531	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C6532	ECUX1A105KBN	C. CAPACITOR CH 10V 1U	1	
C6534	ECUX1A105KBN	C. CAPACITOR CH 10V 1U	1	
C6536	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C6537	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6538	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C6539	ECUX1A105KBN	C. CAPACITOR CH 10V 1U	1	
C6541	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6542,43	EEVHB1H3R3	E. CAPACITOR 50V 3.3U	2	
C6544-47	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C6552-55	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	4	
C6556,57	EEVHB1C470	E. CAPACITOR 16V 47U	2	
C6558	ECUM1C104ZFN	C. CAPACITOR CH 16V 0.1U	1	
C6559	EEVHB1C100	E. CAPACITOR 16V 10U	1	
C6565,66	EEVHB0J220	E. CAPACITOR 6.3V 22U	2	
D2713-16	MA856	DIODE	4	
D2717	MA8056-M	DIODE	1	
D6301	MA4051-L	DIODE	1	
D6302-09	AK04	DIODE	8	
D6310	MA142WK	DIODE	1	
D6311	MA4043L	DIODE	1	
D6312-15	AK04	DIODE	4	
D6316	MA142WK	DIODE	1	
D6317	MA4043L	DIODE	1	
D6318-34	MA142WK	DIODE	17	
D6501	AK04	DIODE	1	
D6502,03	MA721	DIODE	2	
D6511	MA721WK	DIODE	1	
D6512	MA8062-H	DIODE	1	
D6513	MA8039-H	DIODE	1	
IC2701	NJM2903M	IC	1	
IC2702	UPC4558G2	IC	1	
IC2703,04	AN3834K	IC	2	
IC2705	UPC4558G2	IC	1	
IC2706	NJM2903M	IC	1	
IC2707	NJM2904M	IC	1	
IC2708	TB6519F	IC	1	
IC2709	PU3210	TRANSISTOR	1	
IC2710	PU3110	TRANSISTOR	1	
IC2711	PU3210	TRANSISTOR	1	
IC2712	PU3110	TRANSISTOR	1	
IC2714	NJM2903M	IC	1	
IC2715	NJM2904M	IC	1	
IC6301-03	BA6219BFP-Y	IC	3	
IC6304	UPD4538BG	IC	1	
IC6305	NJM2903M	IC	1	
IC6306	UPD4538BG	IC	1	
IC6501,02	BA6887-V3	IC	2	
IC6503	NJM2904M	IC	1	
IC6504,05	UPC4558G2	IC	2	
IC6506-08	NJM2903M	IC	3	
IC6509,10	NJM2904M	IC	2	
IC6511	UPC4558G2	IC	1	
IC6512	M66010GP	IC	1	
IC6513	UPC4558G2	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC6514	ON1114.VT	IC	1	
K2701,02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
L2701,02	VLQ0599J680	COIL 68UH	2	
LB2702	VLP0145	COIL	1	
P2701,02	VJS3813B017	CONNECTOR (FEMALE)	2	
P2703	VJS3319B009	CONNECTOR (FEMALE)	1	
P2704	VJS3406B019	CONNECTOR (FEMALE)	1	
P2705	VJP1929T	CONNECTOR (MALE)	1	
P8301,02	VJP3518B002	CONNECTOR (MALE)	2	
P6303	VJP3518B003	CONNECTOR (MALE)	1	
P6501	VJP3518B002	CONNECTOR (MALE)	1	
P6502	VJP4044A002	CONNECTOR (MALE)	1	
P6503	VJP3172D002	CONNECTOR (MALE)	1	
P6504	VJS3537B026	CONNECTOR (FEMALE)	1	
P6505	VJS3537B032	CONNECTOR (FEMALE)	1	
P6506	VJP3125B002	CONNECTOR (MALE)	1	
P6507	VJP3172D002	CONNECTOR (MALE)	1	
P6508	VJP3172D004	CONNECTOR (MALE)	1	
P6509	VJS2959B008	CONNECTOR (FEMALE)	1	
P6510	VJP3172D002	CONNECTOR (MALE)	1	
P6514	VJP3172D004	CONNECTOR (MALE)	1	
P6520	VJP3172D003	CONNECTOR (MALE)	1	
Q2701	2SD1328	TRANSISTOR	1	
Q2703,04	MSD601-R	TRANSISTOR	2	
Q6301	MSD601-R	TRANSISTOR	1	
Q6302	2SB1073	TRANSISTOR	1	
Q6303	MSD601-R	TRANSISTOR	1	
Q6304	2SB1073	TRANSISTOR	1	
Q6305	MSD601-R	TRANSISTOR	1	
Q6306	2SB1073	TRANSISTOR	1	
Q6307	2SB1073-R	TRANSISTOR	1	
Q6308	MSD601-R	TRANSISTOR	1	
Q6502	2SB709A	TRANSISTOR	1	
Q6503	2SB1073	TRANSISTOR	1	
Q6504	2SB710	TRANSISTOR	1	
Q6505	2SB1073	TRANSISTOR	1	
QR6301-03	XN1112	TRANSISTOR-RESISTOR	3	
QR6304,05	MUN2213	TRANSISTOR-RESISTOR	2	
QR6306-09	XN1213	TRANSISTOR-RESISTOR	4	
QR6314-16	MUN2213	TRANSISTOR-RESISTOR	3	
QR6317	UN221D	TRANSISTOR	1	
QR6318	XN4213	TRANSISTOR-RESISTOR	1	
QR6502	MUN2213	TRANSISTOR-RESISTOR	1	
QR6503	MUN2212	TRANSISTOR-RESISTOR	1	
QR6504	UN2211	TRANSISTOR-RESISTOR	1	
QR6508	XN1212	TRANSISTOR-RESISTOR	1	
QR6511	MUN2113	TRANSISTOR-RESISTOR	1	
QR6514	MUN2113	TRANSISTOR-RESISTOR	1	
QR6515	MUN2213	TRANSISTOR-RESISTOR	1	
QR6517	MUN2213	TRANSISTOR-RESISTOR	1	
R2701	ERJ3RBD273	M.RESISTOR CH 3W 27K	1	
R2703,04	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2	
R2705	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2706	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R2707	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R2710	ERJ3RBD473	M.RESISTOR CH 3W 47K	1	
R2711	ERJ3RBD823	M.RESISTOR CH 3W 82K	1	
R2712	ERJ3RBD153	M.RESISTOR CH 3W 15K	1	
R2713	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R2714,15	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	2	
R2716	ERJ14YJ330	M.RESISTOR CH 1/4W 33	1	
R2717	ERJ14YK2R2	M.RESISTOR CH 1/4W 2.2	1	
R2718	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R2719	ERJ3GEYG393	M.RESISTOR CH 1/16W 39K	1	
R2720-22	ERJ14YJ330	M.RESISTOR CH 1/4W 33	3	
R2723	ERJ14YK2R2	M.RESISTOR CH 1/4W 2.2	1	
R2724	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R2725	ERJ3GEYG393	M.RESISTOR CH 1/16W 39K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2726, 27	ERJ14YJ330	M. RESISTOR CH 1/4W 33	2	
R2728, 29	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R2730	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2731	ERJ3GEYJ184	M. RESISTOR CH 1/16W 180K	1	
R2732	ERJ3GEYJ153	M. RESISTOR CH 1/16W 15K	1	
R2733	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2734	ERJ3GEYJ184	M. RESISTOR CH 1/16W 180K	1	
R2735	ERJ3GEYJ153	M. RESISTOR CH 1/16W 15K	1	
R2736	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R2737	ERJ3GEYG273	M. RESISTOR CH 1/16W 27K	1	
R2738	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R2739	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2740	ERJ3GEYJ392	M. RESISTOR CH 1/16W 3.9K	1	
R2741	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R2742	ERJ3GEYJ392	M. RESISTOR CH 1/16W 3.9K	1	
R2743	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R2744	ERJ3GEYG222	M. RESISTOR CH 1/16W 2.2K	1	
R2745	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2747	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2748	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R2749	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R2750	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R2751	ERJ8GEYJR33	M. RESISTOR CH 1/8W 0.33	1	
R2752	ERJ8GEYJR47	M. RESISTOR CH 1/8W 0.47	1	
R2753	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R2754-56	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	3	
R2757	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R2758	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2760	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R2761	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2762	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R2763	ERJ3GEYJ823	M. RESISTOR CH 1/16W 82K	1	
R2764	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R2765	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R2766	ERJ3GEYG392	M. RESISTOR CH 1/16W 3.9K	1	
R2768	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R2769	ERJ3RBD153	M. RESISTOR CH 3W 15K	1	
R2770	ERJ3RBD823	M. RESISTOR CH 3W 82K	1	
R2771	ERJ3RBD473	M. RESISTOR CH 3W 47K	1	
R2772	ERJ3RBD102	M. RESISTOR CH 3W 1K	1	
R2773, 74	ERJ14YK2R2	M. RESISTOR CH 1/4W 2.2	2	
R2775	ERJ3RBD273	M. RESISTOR CH 3W 27K	1	
R2777	ERJ3GEYJ823	M. RESISTOR CH 1/16W 82K	1	
R2778	ERJ3GEYG912	M. RESISTOR CH 1/16W 9.1K	1	
R2779	ERJ3GEYJ334	M. RESISTOR CH 1/16W 330K	1	
R2780, 81	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R2782	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2783	ERJ3GEYG683	M. RESISTOR CH 1/16W 68K	1	
R2784	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R2786	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	1	
R2787	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R2788	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R2789	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R2790	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2791	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	1	
R2792	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R2793	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R2794	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R2795	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2796	ERJ3RBD823	M. RESISTOR CH 3W 82K	1	
R2798	ERJ3RBD102	M. RESISTOR CH 3W 1K	1	
R2799	ERJ3GEYG154	M. RESISTOR CH 1/16W 150K	1	
R2800	ERJ8RQJR27	M. RESISTOR CH 1/8W 0.27	1	
R2801, 02	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	2	
R2803	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R2804	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R2805	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R2806	ERJ3GEYG333	M. RESISTOR CH 1/16W 33K	1	
R2807	ERJ3GEYG563	M. RESISTOR CH 1/16W 56K	1	
R2808	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R6301	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R6302	ERJ14YJ561	M. RESISTOR CH 1/4W 560	1	
R6303-07	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	5	
R6308	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R6309, 10	ERJ3GEYJ224	M. RESISTOR CH 1/16W 220K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6311	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R6312, 13	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R6314	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R6315	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R6316, 17	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	2	
R6318	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R6319	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R6320	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R6321	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R6322, 23	ERJ3GEYJ394	M. RESISTOR CH 1/16W 390K	2	
R6324-29	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	6	
R6330	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R6331, 32	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	2	
R6333	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R6334	ERJ3GEYJ151	M. RESISTOR CH 1/16W 150	1	
R6335	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R6336	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R6337	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R6338	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R6339	ERJ3GEYJ151	M. RESISTOR CH 1/16W 150	1	
R6340	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R6341	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R6342	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R6343	ERJ3GEYJ151	M. RESISTOR CH 1/16W 150	1	
R6344	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R6345	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R6346	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R6347-49	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	3	
R6501	ERJ3RBD123	M. RESISTOR CH 3W 12K	1	
R6502	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R6503	ERJ3GEYG154	M. RESISTOR CH 1/16W 150K	1	
R6504	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R6505	ERJ14YJ101	M. RESISTOR CH 1/4W 100	1	
R6506	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R6507	ERJ3GEYJ334	M. RESISTOR CH 1/16W 330K	1	
R6508	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R6509	ERJ3RBD332	M. RESISTOR CH 3W 3.3K	1	
R6510	ERJ3RBD153	M. RESISTOR CH 3W 15K	1	
R6511	ERJ3GEYJ181	M. RESISTOR CH 1/16W 180	1	
R6512	ERJ3RBD153	M. RESISTOR CH 3W 15K	1	
R6513	ERJ3RBD113	M. RESISTOR CH 3W 11K	1	
R6514	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R6515	ERJ14YK3R9	M. RESISTOR CH 1/4W 3.9	1	
R6516-18	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	3	
R6519	ERJ3RBD472	M. RESISTOR CH 1/10W 4.7K	1	
R6520	ERJ3GEYJ823	M. RESISTOR CH 1/16W 82K	1	
R6521	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R6524	ERJ14YK5R6	M. RESISTOR CH 1/4W 5.6	1	
R6525-27	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	3	
R6529	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R6530	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R6532	ERJ3GEYG103	M. RESISTOR CH 1/16W 10K	1	
R6533, 34	ERJ3RED184	M. RESISTOR CH 3W 180K	2	
R6535	ERJ3GEYG123	M. RESISTOR CH 1/16W 12K	1	
R6536	ERJ3GEYG363	M. RESISTOR CH 3W 36K	1	
R6537, 38	ERJ3GEYG223	M. RESISTOR CH 1/16W 22K	2	
R6541	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R6542	ERJ3RBD103	M. RESISTOR CH 3W 10K	1	
R6543	ERJ3RBD392	M. RESISTOR CH 3W 3.9K	1	
R6544	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R6545	ERJ3RBD104	M. RESISTOR CH 3W 100K	1	
R6546	ERJ3RBD103	M. RESISTOR CH 3W 10K	1	
R6547	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R6548	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R6549	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R6550	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R6551	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R6552	ERJ3GEYJ184	M. RESISTOR CH 1/16W 180K	1	
R6553, 54	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R6555	ERJ3GEYJ184	M. RESISTOR CH 1/16W 180K	1	
R6556, 57	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R6558	ERJ3GEYJ184	M. RESISTOR CH 1/16W 180K	1	
R6559, 60	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R6561	ERJ3GEYJ184	M. RESISTOR CH 1/16W 180K	1	
R6562, 63	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6564	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R6565	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6566	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R6567	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6568	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6569	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6570	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R6571	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6572	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R6573	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6574	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6575	ERJ3RBD182	M.RESISTOR CH 3W 1.8K	1	
R6576,77	ERJ3RBD223	M.RESISTOR CH 3W 22K	2	
R6578-80	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	3	
R6581-86	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	6	
R6587-89	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	3	
R6590	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6592	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6593,94	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R6595	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6596	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R6597	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R6598	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R6599	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R6600	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R6602	ERJ14YK3R3	M.RESISTOR CH 1/4W 3.3	1	
R6603,04	ERJ14YK5R6	M.RESISTOR CH 1/4W 5.6	2	
R6607	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6611-13	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R6614	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6615-17	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R6618	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
S6501	VSP1054	SWITCH	1	
S6502	VSP1055	SWITCH	1	
S6503	VSP1054	SWITCH	1	
S6504	VSS0512	SWITCH	1	
TP2701-04	VJR0098	TEST POINT	4	
TP6501-05	VJR0098	TEST POINT	5	
VR2701,02	EVMECSA00B12	V.RESISTOR 100	2	
VR6501	EVMECSA00B24	V.RESISTOR 20K	1	
VR6502	EVMECSA00B54	V.RESISTOR 50K	1	
		MISCELLANEOUS		
	VWJ26HW080MM	FLAT CARD CABLE	1	
	VWJ32HW080MM	FLAT CARD CABLE	1	
■	VEP07977A	TIMER C.B.A.	1	(RTL)
C7501	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7502	ECEA1HKS100	E.CAPACITOR 50V 10U	1	
C7508,09	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C7510	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7512	ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	1	
C7513,14	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7515	ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C7516,17	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7518,19	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7520,21	ECUM1E473ZFN	C.CAPACITOR CH 25V 0.047U	2	
C7522	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7523	ECEA0JKS220	E.CAPACITOR 6.3V 22U	1	
C7524	ECUX1H223KBN	C.CAPACITOR CH 50V 0.22U	1	
C7525,26	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	2	
C7527	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C7528	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
D7501	MA4220	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D7502	MA165	DIODE	1	
D7503-08	LN28RCPPU	DIODE	6	
D7509,10	LN31GCPHLMU	LED	2	
D7511,12	LN376GCPXUY	DIODE	2	
D7513,14	LN48YCPL	DIODE	2	
D7515,16	LN28RCPPU	DIODE	2	
D7517	MA165	DIODE	1	
D7518	MA4056-H	DIODE	1	
DP7501	VSL0512	DISPLAY	1	
IC7501	M35500AFP	IC	1	
IC7502	S80743AL	IC	1	
IC7503	M66010GP	IC	1	
IC7504	BA6810F	IC	1	
IC7505	RN5RZ38BA	IC	1	
L7501	VLQ0599J220	COIL 22UH	1	
LB7501-04	VLP0147	COIL	4	
P7501	VJS3537B017	CONNECTOR (FEMALE)	1	
P7502	VJS3537B019	CONNECTOR (FEMALE)	1	
P7503 C	VJP1231T	CONNECTOR (MALE) 4P	1	
P7503	VJS1231T	CONNECTOR (FEMALE)	1	
P7504	VJS2183	CONNECTOR (FEMALE)	1	
P7601	VJS1231T	CONNECTOR (FEMALE)	1	
QR7501-16	MUN2112	TRANSISTOR-RESISTOR	16	
QR7517-19	MUN2111	TRANSISTOR-RESISTOR	3	
QR7520-23	UN211F	TRANSISTOR-RESISTOR	4	
R7501,02	ERDS2T0	C.RESISTOR 1/4W 0	2	
R7503,04	ERDS2TJ132	C.RESISTOR 1/4W 1.3K	2	
R7505	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R7506	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R7507	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R7510	ERJ6GEYG432	M.RESISTOR CH 1/10W 4.3K	1	
R7511-18	ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	6	
R7520-24	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	5	
R7526	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
R7528	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
R7539-41	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	3	
R7542	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R7543-46	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
R7555-62	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	8	
R7563	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R7564,65	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R7566	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R7567	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R7569-72	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	4	
R7573	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R7574	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
RX7501,02	EXBF6E104J	COMBI.R-R 100K	2	
RX7503	EXBF8E104J	COMBI.R-R 100K	1	
S7501	VSP1053	SWITCH	1	
VR4004	EVNCYAA03B53	V.RESISTOR 5K	1	
ZB7501	VJF1331	FIP HOLDER	1	
ZB7503-08	VMD0504	LED HOLDER	6	
ZB7509,10	VMX1932	LED SPACER	2	
ZB7511-16	VMD0504	LED HOLDER	6	
		MISCELLANEOUS		
	VEE0C27	CABLE	1	P7601-P7503
■	VEP04695A	FRONT (L) C.B.A.	1	(RTL)

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4851	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4852, 53	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	2	
C4854, 55	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C4856	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C4857	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
D4851, 52	MA165	DIODE	2	
IR4851	RPM6937-V11	REMOTE CONTROL RECEIVER	1	
JK4851	VEJ1801	JACK	1	
K4851	VWJ0119	JUMPER	1	
LB4851, 52	VLP0145	COIL	2	
P4851	VJS3537B022G	CONNECTOR (FEMALE)	1	
R4851-53	ERJ6GEYG750	M. RESISTOR CH 1/10W 75	3	
R4854, 55	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R4856	ERDS2TJ470	C. RESISTOR 1/4W 47	1	
R4857	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R4858	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
S4851	EVQ11407K	SWITCH	1	
S4852	ESD170306	SWITCH	1	
S4853	VSR0221	SWITCH	1	
ZB4851	VMD2247	INFRA HOLDER	1	
ZB4852	VGU7654	SLIDE KNOB	1	
ZB4853	VGU7652	MIC KNOB	1	
ZB4854	VGF0740	VC SHEET	1	
■	VEP04696D	FRONT (R) C.B.A.	1	(RTL)
C4801, 02	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C4803, 04	ECUX1H223KBN	C. CAPACITOR CH 50V 0.22U	2	
C4805	ECEA1CKA330	E. CAPACITOR 16V 33U	1	
C4806	ECEA1EKS3R3	E. CAPACITOR 25V 3.3U	1	
C4807	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C4808	ECEA1AKA330	E. CAPACITOR 10V 33U	1	
C4809-11	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	3	
C4812	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4813	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4814, 15	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C4816	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
D4801	LN476YCPX4	DIODE	1	
IC4801	VCR0172	IC	1	
JA1	VEE0E94	FRONT (R) CABLE	1	
JK4801	VJJ0264	HEADPHONE JACK	1	
JK4802	VJJ0263	MIC JACK	1	
L4801, 02	VLQ0599J221	COIL 220UH	2	
L4803, 04	VLQ0599J471	COIL 470UH	2	
LB4801	VLP0145	COIL	1	
P4801	VJS3537B020G	CONNECTOR (FEMALE)	1	
QR4801	UN211F	TRANSISTOR-RESISTOR	1	
R4801	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R4802	ERJ6GEYG682	M. REISITOR CH 1/10W 6.8K	1	
R4803, 04	ERJ6GEYG432	M. RESISTOR CH 1/10W 4.3K	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4805	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R4806	ERJ6RBD471	M. RESISTOR CH 1/10W 470	1	
R4807	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4808	ERJ6RBD162	M. RESISTOR CH 1/10W 1.6K	1	
R4809, 10	ERJ6RBD101	M. RESISTOR CH 1/10W 100	2	
R4811	ERJ6RBD162	M. RESISTOR CH 1/10W 1.6K	1	
R4812	ERJ6RBD471	M. RESISTOR CH 1/10W 470	1	
R4813	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4814	ERJ6RBD162	M. RESISTOR CH 1/10W 1.6K	1	
R4815	ERJ6RBD471	M. RESISTOR CH 1/10W 470	1	
R4816	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4817	ERJ6RBD101	M. RESISTOR CH 1/10W 100	1	
S4801-06	EVQ11407K	SWITCH	6	
VR4801	EVJYM0F15C23	V. RESISTOR 2K	1	
VR4802	EWANYJX1054J	V. RESISTOR 1.05M	1	
VR4803	EVJ021F1554J	V. RESISTOR 1.55M	1	
ZB4801	VGU7650	VOLUME KNOB	1	
ZB4802, 03	VGU7653	REC LEVEL KNOB	2	
ZB4804	VGU7652	MIC KNOB	1	
ZB4805	VMD2326	REFLECTOR	1	
ZB4806	VKM3673	REC VOL PLATE	1	
ZB4807	VGF0208	REC VR SHEET	1	
ZB4808	VGF0740	VC SHEET	1	
■	VEP07966A	MODULAR C.B.A.	1	(RTL)
JK7601	VJJ0587	4P MODULAR JACK	1	
P7601	VJP1231T	CONNECTOR (MALE) 4P	1	
		MISCELLANEOUS		
	VMX1021	LOCKING SPACER	1	
■	VEP07965A	FRONT LED C.B.A.	1	(RTL)
D7751	LN01301C	DIODE	1	
D7752, 53	LN01801C	DIODE	2	
D7754	LN01301C	DIODE	1	
P7751	VJP1244T	CONNECTOR (MALE) 4P	1	
P7752	VJS3537B009G	CONNECTOR (FEMALE)	1	
■	VEP07968B	IR C.B.A.	1	(RTL)
C7701, 02	ECKF1H103ZF	C. CAPACITOR 50V 0.01U	2	
D7701, 02	MA4056-H	DIODE	2	
LB7701	VLP0196	COIL	1	
P7701	VJR1044	CONNECTOR	1	
P7751	VJS1231T	CONNECTOR (FEMALE)	1	
		MISCELLANEOUS		
	VEE0C28	CABLE	1	IR-P7751

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	VEE0E95	CABLE	1	
	■ VEP03E18A	5P JACK C. B. A.	1	(RTL)
JK3781	VJJ0567	5P SOCKET	1	
P3781	VJP1244T	CONNECTOR (MALE) 4P	1	
	■ VEP07967A	DV JACK C. B. A.	1	(RTL)
JK7651	VJJ0568	DV JACK	1	
P7651	VJP1246T	CONNECTOR (MALE) 6P	1	
	■ VEP01814A	POWER SUPPLY C. B. A.	1	(RTL)
⚠ C1101-03	ECKMWS102MEF	C. CAPACITOR 1000P	3	
C1104	ECKD2H101KB	C. CAPACITOR 500V 100P	1	
⚠ C1105, 06	ECQU2A154MVA	P. CAPACITOR 100V 0.15U	2	
C1107	ECEC2GG121HZ	E. CAPACITOR 400V 120U	1	
C1108	ECCZ3A121KGE	C. CAPACITOR 1KV 120P	1	
C1109	ECKD2H103PU	C. CAPACITOR 500V 0.01U	1	
C1110	ECA0GXLV331	E. CAPACITOR 4V 330U	1	
C1111	ECKF1H102KB	C. CAPACITOR 50V 1000P	1	
C1112	ECQB1H822JF	P. CAPACITOR 50V 8200P	1	
C1113	ECQE6104KF	P. CAPACITOR 630V 0.1U	1	
C1114	ECA1VXLV470	E. CAPACITOR 35V 47U	1	
C1116	EEUFA1A332	E. CAPACITOR 10V 3300U	1	
C1117	EEUFA1A102	E. CAPACITOR 10V 1000U	1	
C1118	ECQV1H104JM	P. CAPACITOR 50V 0.1U	1	
C1121	EEUFA1E222	E. CAPACITOR 25V 2200U	1	
C1122	EEUFA1E102B	E. CAPACITOR 25V 1000U	1	
C1123	ECKD2H101KB	C. CAPACITOR 500V 100P	1	
C1124	EEUFA1A332	E. CAPACITOR 10V 3300U	1	
C1125	EEUFA1A102	E. CAPACITOR 10V 1000U	1	
C1126	ECKD2H101KB	C. CAPACITOR 500V 100P	1	
C1127	EEUFA1H820	E. CAPACITOR 50V 82U	1	
C1128	ECKF1H103ZF	C. CAPACITOR 50V 0.01U	1	
C1129	ECKD2H101KB	C. CAPACITOR 500V 100P	1	
C1130	EEUFA1V151	E. CAPACITOR 35V 150U	1	
C1131	ECKF1H103ZF	C. CAPACITOR 50V 0.01U	1	
C1132	ECKD2H101KB	C. CAPACITOR 500V 100P	1	
C1133	EEUFA0J561	E. CAPACITOR 6.3V 560U	1	
C1134, 35	ECQB1H103JF	P. CAPACITOR 50V 0.01U	2	
D1102	S1WBA60S	DIODE	1	
D1103	AP01C	DIODE	1	
D1104	MA185	DIODE	1	
D1105	MA700	DIODE	1	
D1106	MA4200-H	DIODE	1	
D1107	1SS254	DIODE	1	
D1108, 09	ERA15-08	DIODE	2	
D1110	RD100E	DIODE	1	
D1121	RL4ZP	DIODE	1	
D1122	F5KQ60	DIODE	1	
D1123, 24	ERA22-04	DIODE	2	
D1125	11EQS04	DIODE	1	
D1126	F5KQ40	DIODE	1	
D1130	MA7300B	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ F1101	XBA2C16TH15	FUSE	1	
IC1101	STRM6559LF	IC	1	
IC1102	HA17431PA	IC	1	
⚠ IP1101	VSF0015A10	IC PROTECTER	1	
⚠ L1101, 02	ELJ18D221B	LINE FILTER	2	
L1107	VLQ0655K220	COIL 22UH	1	
L1121, 22	VLQ0655K220	COIL 22UH	2	
L1123, 24	ELESE101KA	COIL 100UH	2	
LB1103, 04	VLP0083	COIL	2	
LB1105	VLP0085	COIL	1	
⚠ P1101	VJS3306	CONNECTOR (FEMALE)	1	
P1102	VJP1239T	CONNECTOR (MALE)	1	
⚠ Q1101	PC123FY2	PHOTO COUPLER	1	
R1101	ERC12AGM334	S. RESISTOR 1/2W 330K	1	
R1102	ERG1SJ393	M. RESISTOR 1W 39K	1	
R1105	ERDS1TJ395	C. RESISTOR 1/2W 3.9M	1	
R1106	ERDS1TJ475	C. RESISTOR 1/2W 4.7M	1	
R1107	ERDS2FJ124	C. RESISTOR 1/4W 120K	1	
R1108	ERDS2FJ101	C. RESISTOR 1/4W 100	1	
R1109	ERDS2FJ152	C. RESISTOR 1/4W 1.5K	1	
R1110	ERDS2FJ103	C. RESISTOR 1/4W 10K	1	
R1111	ERDS2FJ331	C. RESISTOR 1/4W 330	1	
R1112	ERDS2FJ471	C. RESISTOR 1/4W 470	1	
R1113	ERX1SJR82E	M. RESISTOR 1W 0.82	1	
R1114	ERDS2FJ222	C. RESISTOR 1/4W 2.2K	1	
R1115	ERDS2FJ2R7	C. RESISTOR 1/4W 2.7	1	
R1116	ERQS2CKG2701	M. RESISTOR 1/4W 2.7K	1	
R1117	ERQS2CKG6201	M. RESISTOR 1/4W 6.2K	1	
R1118	ERDS2TJ272	C. RESISTOR 1/4W 2.7K	1	
R1119	ERQS2CKG2701	M. RESISTOR 1/4W 2.7K	1	
R1121	ERDS2TJ271	C. RESISTOR 1/4W 270	1	
R1122	ERDS2TJ561	C. RESISTOR 1/4W 560	1	
⚠ T1101	VLT0915	TRANSFORMER	1	
ZA1101, 02	TP00351-51	FUSE CLIP	2	
ZA1103	VSC4205	SHIELD CASE	1	
ZA1104, 05	VSC3434	SHIELD CASE	2	
ZA1107	VSC4259	HEAT SINK	1	
ZA1108	VMP4717	AC PLATE	1	
ZA1109	VHD0418	SCREW	1	
ZA1110, 11	XTN3+8G	SCREW	2	
ZA1112	XTN3+10G	SCREW	1	
⚠ ZB1101, 02	VMZ2212	CAPACITOR COVER	2	
⚠ ZB1104	VMZ2812	BARRIER	1	

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